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Credit Card Spending and Borrowing since the Start of the COVID-19 Pandemic

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Consumers improved their financial health early during the COVID-19 pandemic, but credit card revolving and delinquencies have been rising since 2021, in terms of both the share of accounts and average balances. Financial stress is especially high among lower-income cardholders, whose credit card revolving and delinquencies have risen faster than those of other income cohorts. This is consistent with excess savings being depleted faster among lower-income cohorts. The rising financial stress suggests a weakening in consumption as utilization rates, revolving amounts, and delinquencies all continue to rise. Balances on delinquent accounts held by lower-income consumers are approaching their credit limits. With utilization rates of 80 to 90 percent on average, these cardholders might have to cut their spending. An unemployment spell might cause further distress for these individuals and potentially others who are not currently delinquent.

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The views expressed herein are those of the author and do not indicate concurrence by the Federal Reserve Bank of Boston, the principals of the Board of Governors, or the Federal Reserve System.

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With the onset of the COVID-19 pandemic in the United States in the spring of 2020, consumers drastically reduced their spending, including spending on credit cards. Both current credit card spending and revolving—unpaid balances carried over from previous billing periods—declined steeply. Many consumers improved their financial health by repaying their credit card revolving debt fully or partially.

However, starting in the second quarter of 2021, credit card spending increased again. At the end of the second quarter of 2023, credit card balances exceeded $1 trillion for the first time, and the number of open credit card accounts had grown by 70 million since 2019 (Federal Reserve Bank of New York 2023).[1] Credit card revolving balances and delinquencies increased as well.[2] While the average balance for all credit card accounts began declining at the start of the pandemic in March 2020, the average revolving balance and the number of delinquent accounts declined with a lag.

This paper uses Y-14M credit card account data to show how credit card spending, revolving balances, and delinquencies changed from before the start of the pandemic to July 2023 (the most recent Y-14M data).[3] I include data from all the banks that are in the sample throughout the sample period of 2015 to 2023 but remove data from two banks that were in the sample for only some of that period. The analysis is based on a 0.1 percent random sample of non-business, non-corporate active accounts. I show that credit card delinquencies have been rising sharply and that lower-income consumers have been affected the most, with their credit card spending, revolving balances, and delinquencies rising much faster than the same measures for other income groups. These are signals of consumer financial stress as borrowing costs rise.

While these trends are noticeable when the economy is strong, potential future unemployment spells might bring severe financial stress to lower-income consumers. In addition, the pandemic student loan forgiveness program has ended, potentially exacerbating the financial stress for consumers who have unpaid student debt.

Excess Savings from the Pandemic Are Being Depleted

During the COVID-19 pandemic, consumers reduced their spending due to mobility restrictions, while at the same time their income increased with the help of government stimulus checks and debt forgiveness on obligations such as rent and student loans.

As a result, consumers in all income cohorts accumulated excess savings in their bank accounts relative to their pre-pandemic levels. In Appendix Figure 1, the cumulative excess savings are depicted as the total area above the red trend line from January 2020 to August 2021. The cumulative drawdown of the excess savings, shown as the area below the red trend line starting in August 2021, has resulted in a decline in excess savings. At the aggregate level, excess savings reached their peak of approximately $2.1 trillion in August 2021, fell to $470 billion in March 2023, and dropped further to $190 billion in June 2023 (Abdelrahman and Oliveira 2023a, 2023b, based on data from the Bureau of Economic Analysis). If the recent pace of the drawdown continues, the aggregate excess savings are likely to be exhausted by the end of 2023 or early 2024.

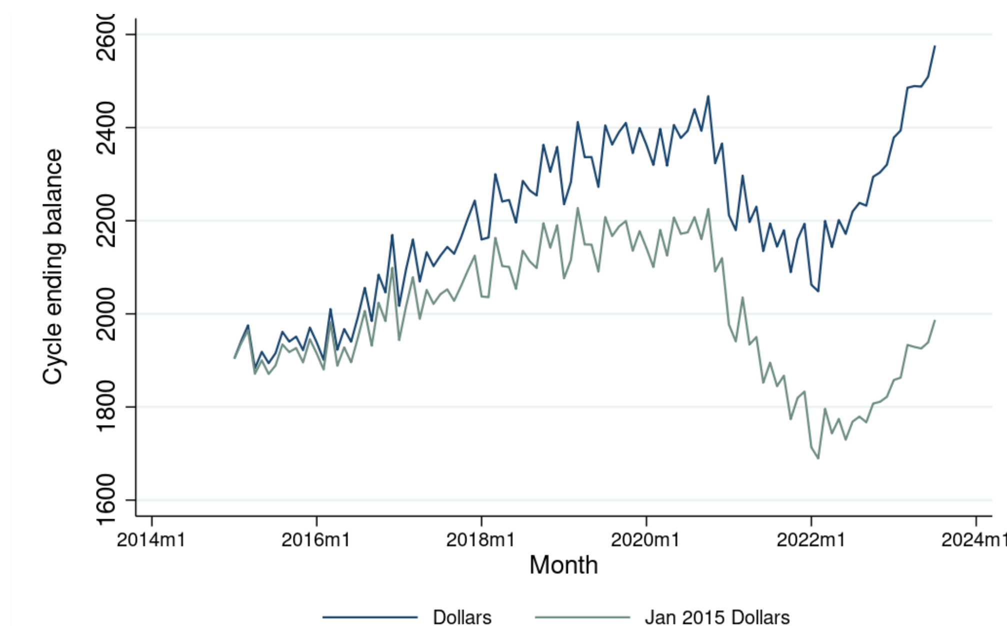
Barbiero and Patki (2023) estimate that consumers in the top income bracket accumulated the highest amount of savings in total. However, as a percentage of 2019 income, the bottom income quartile accumulated about 30 percent of their annual income, while the top income quartile accumulated 15 percent of their annual income at the peak in January 2022, before the drawdowns started. Data from the JP Morgan Chase Institute show that at the end of June 2022, households in the lowest income quartile held 60 percent more in their checking accounts relative to 2019, while those in the top income quartile held 45 percent more (Wheat and Deadman 2022).

There is evidence that savings are being depleted across all income quartiles, but the bottom income quartile's savings are likely to be depleted first. JP Morgan Chase Institute data show that excess savings have been decreasing at a pace that is roughly equal across income quartiles, but because the bottom quartile has had the lowest level of extra savings, consumers in that income cohort are likely to reach the pre-pandemic level of savings ahead of the other quartiles. A study conducted in March 2023 estimated that, on average, the lower-income group still had a 15-day buffer, much lower than at its peak level.[4]

Average Credit Card Balances Have Been Rising

The average balance on all credit card accounts dropped from $1,823 in February 2020 to $1,545 in March 2021 before rising above the pre-pandemic level to $1,916 in July 2023. Among accounts with a revolving balance, the average balance dropped from $3,055 in May 2021 to $2,664 in January 2022 before increasing to $3,006 in July 2023. For delinquent accounts at least 30 days past due, the average balance fell from $2,467 in October 2020 to $2,049 in February 2022 before rising to $2,576 in July 2023 (Figure 1). Even after the analysis adjusts for inflation, the average balance among all accounts and among delinquent accounts was higher in July 2023 than it was two years earlier.

Figure 1: Average Balance among Delinquent Accounts at Least 30 Days Past Due, Nominal and Inflation-adjusted Dollars, January 2015–July 2023



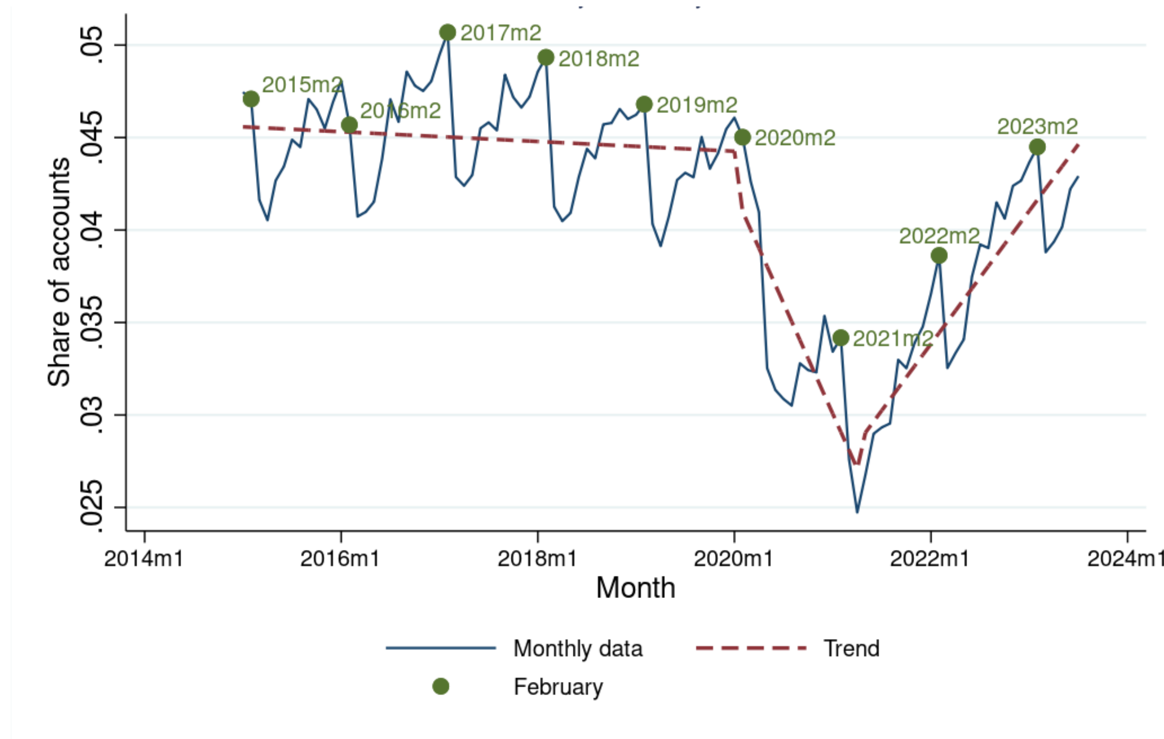
Source: Y-14M monthly data on credit card accounts.

Share of Delinquent Accounts Is Approaching Its Pre-pandemic Level

The share of credit card accounts that are delinquent (at least 30 days past due) was roughly flat for several years before the pandemic, subject to seasonal variation, and hovered around 4.5 percent of accounts until February 2020 (Figure 2). That share dropped substantially during the

pandemic to 2.47 percent in April 2021 before rising steeply, reaching 4.45 percent in February 2023. Although the fraction of accounts that are delinquent remained slightly below its pre-pandemic average in July 2023 at 4.29 percent, the recent trend suggests that the rate might exceed that level during the next few months.

Figure 2: Share of Credit Card Accounts 30+ Days Past Due Each Month, January 2015–July 2023



Source: Y-14M monthly credit card account data.

Note: The green dots mark February of each year, as the data display extreme seasonality. The February peak occurs when unpaid holiday spending becomes delinquent.

Appendix Figure 2 depicts how credit card delinquencies are distributed geographically. The map shows the proportion of credit card accounts in each Zip code that were delinquent (at least 30 days past due) at any time from April 2021 to July 2023. The regional variation did not change when different time periods were used. Accounts held by consumers living in the US South have had a substantially higher likelihood of being delinquent compared with accounts held by consumers living in other parts of the country.

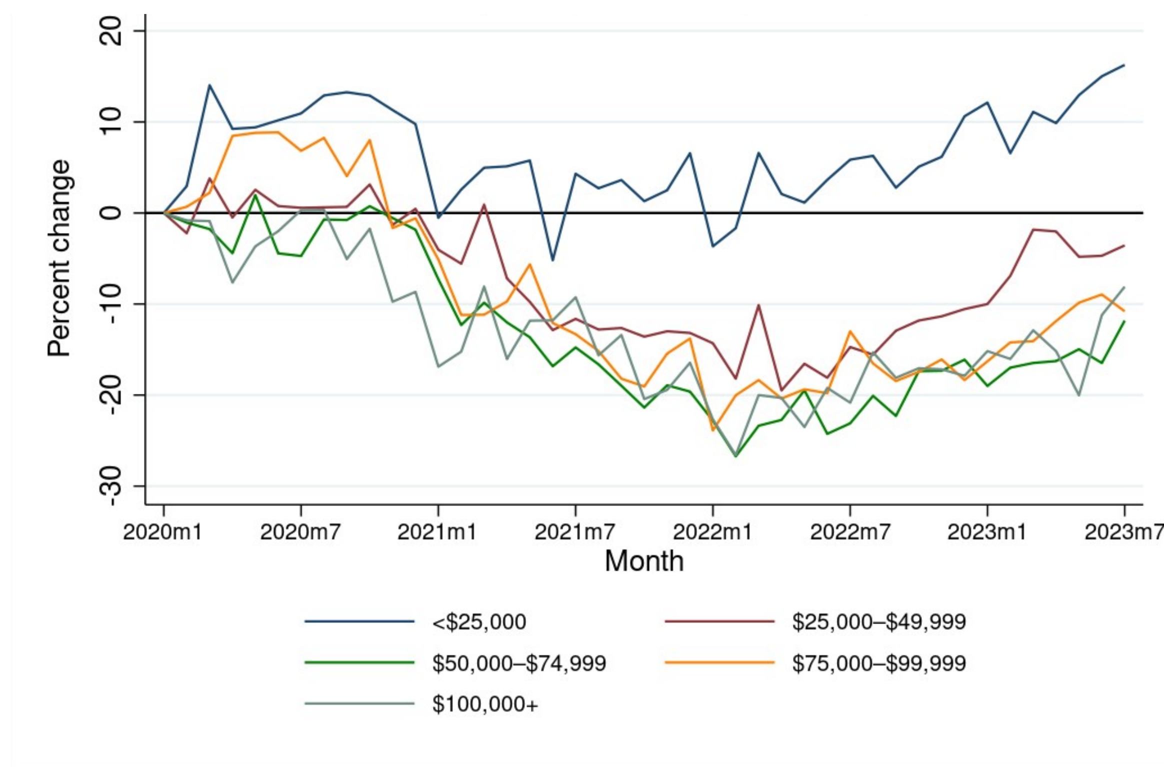
Spending and Debt Are Increasing Fastest among Lowest-Income Consumers

Although credit card spending and debt have risen among consumers in all income cohorts, the rate of increase has been highest for the bottom-income consumers.

Accounts held by the lowest-income cardholders, that is, those with a reported annual household income of less than $25,000, have had the highest percentage increase in credit card spending, revolving balances, and delinquencies since January 2020. Accounts held by consumers in the second-lowest income cohort—those with an annual household income of $25,000 to $50,000—also have exhibited an increase in average revolving and delinquent balances. The average balance on delinquent accounts held by the bottom-income consumers increased 37 percent (Appendix Figure 3) from January 2020 to July 2023, and the average balance on revolving accounts increased 21 percent. By contrast, for the top three income cohorts (that is, for all consumers with an annual household income of more than $50,000 a year), nominal balances for delinquent accounts were roughly at their pre-pandemic levels in July 2023.

Some of the increase in balances can be attributed to inflation. When measured in inflation-adjusted dollars, the average balances of all accounts for consumers in every income cohort were lower in July 2023 than in January 2020, although for the bottom-income cohort, the average balance was approximately equal to its pre-pandemic level. However, even after the analysis adjusts for inflation, the average balance among delinquent accounts in the lowest-income cohort increased 16 percent during that period (Figure 3).

Figure 3: Percentage Change in the Average Balance on Delinquent Accounts 30+ Days Past Due Based on 2015 Dollar Values, January 2020–July 2023



Source: Y-14M monthly data on credit card accounts.

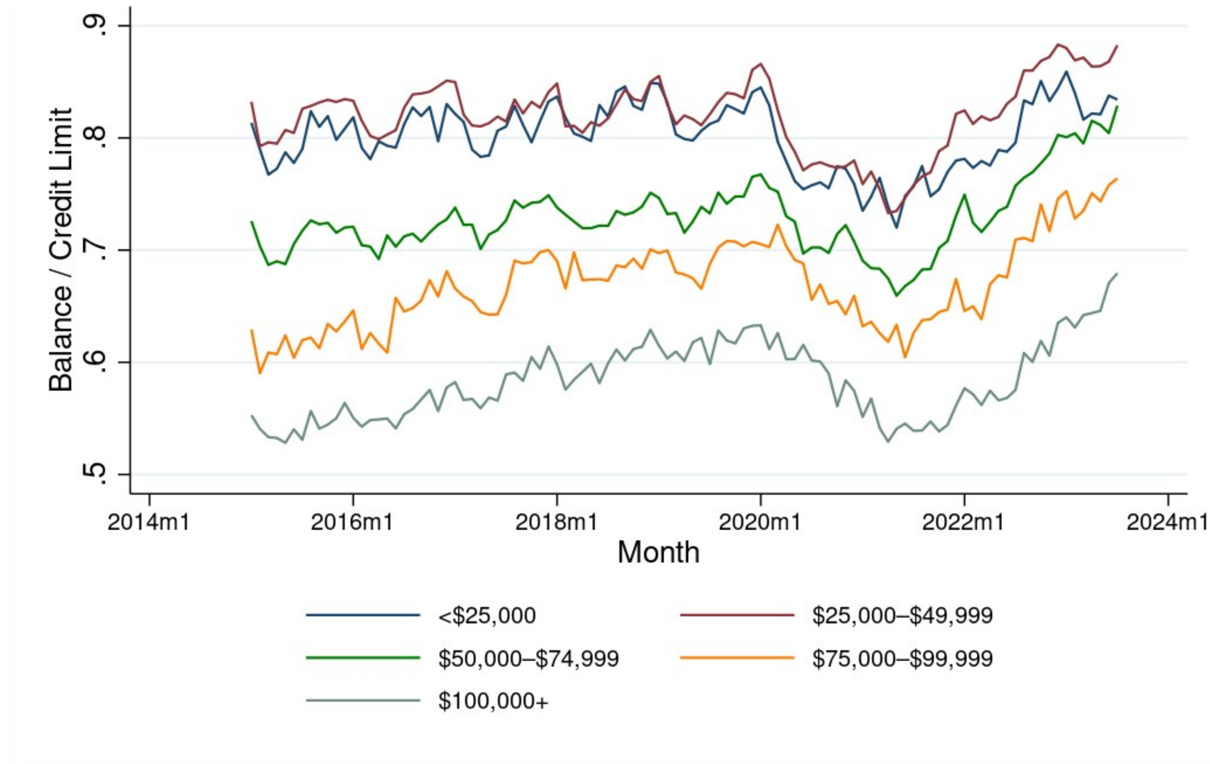
Utilization Rates Have Returned to Pre-pandemic Levels

The utilization rate measures the ratio of the outstanding credit card account balance to the credit limit on the account, showing the share of the available credit being used. Throughout the entire sample period, the rate of credit utilization among revolving accounts was much higher than among non-revolving accounts, and it was highest among delinquent accounts. But even for delinquent accounts, the utilization rate dropped during the pandemic, when consumers reduced their borrowing. However, the utilization rate has been rising since April 2021 regardless of the revolving status (non-revolving, revolving, delinquent) or cardholder's income. At the most recent data point, in July 2023, the utilization rates for all cardholder income groups were above their pre-pandemic, February 2020 levels.

Among delinquent accounts, the utilization rate is especially high for consumers with an annual household income of less than $50,000. It ranges from 80 to 90 percent (Figure 4), leaving those consumers with a very small amount of credit left on their accounts to cushion against a deterioration of their financial situation. Once a cardholder reaches the credit limit, they

cannot spend any more, and they have to make their credit card payment, potentially forcing a drop in their spending.

Figure 4: Average Utilization Rate among Accounts 30+ Days Past Due by Income, 2015–2023



Source: Y-14M monthly credit card account data.

Changes in the utilization rate typically occur due to changes in the level of credit card spending. In fact, in a given month, the credit limit increases or decreases for only a very small fraction of accounts. Since the onset of the COVID-19 pandemic, the share of accounts for which the credit limit has decreased has been slightly below its pre-pandemic level, and there has been no variation in that fraction by income level. However, the average credit limit has not kept up with the inflation rate, and after an adjustment for inflation, it is below its early 2020 level (Appendix Figure 4). Thus, on average, cardholders might not be buying more even when their utilization rate rises.

Reasons Why the Situation Could Deteriorate

This section lists some of the factors that might contribute to an increase in financial stress in the near future. Note that these factors are not independent of each other or mutually exclusive. On the contrary, if multiple factors occur, their effects could be compounded. For example, a rise in the unemployment rate might force more cardholders to revolve on their credit cards or existing borrowers to increase their debt, while a simultaneous increase in the interest rate charged on those accounts would raise the amount they owe on their outstanding balance.

1. Rising financial stress suggests a weakening in consumption as utilization rates, revolving amounts, and delinquencies continue to rise. The year-over-year change in new spending on credit cards, which was positive for several years before the pandemic, recently fell to near 0 percent, indicating a slowdown in consumption growth.

2. The US economy is not in a recession, but if a recession does occur, lower-income cardholders will likely suffer the most, as they have the smallest financial buffer and the fastest-growing debt. An unemployment spell would add further distress to individuals with delinquent accounts and likely to others whose accounts are not currently delinquent.

3. Thanks to the student loan forgiveness program, which had been in effect since the beginning of the pandemic, federal student loan borrowers did not have to make payments for more than three years. However, the program has ended, potentially exacerbating financial stress on the borrowers. The pause in loan payments for most federal student loan borrowers started in March 2020. The loans started accruing interest again on September 1, 2023, and borrowers had to resume or begin making payments in October 2023. For most borrowers, interest rates reverted to the rates in effect before the payment pause.[5]

Credit cardholders with student loan debt tend to carry higher credit card balances compared with those without student debt, and the difference in the average card balance between the two groups recently increased (author's calculations based on data from CCP/Equifax). Cardholders with student loan debt are likely to become more vulnerable if economic conditions deteriorate in general or as they start repaying their student loans.

4. Credit card annual percentage rates (APRs) track the federal funds rate and therefore have risen lately. For consumers with revolving debt, the increase in APRs has led to an increase in the amount owed on their credit cards, thus exacerbating their financial stress. For revolvers, every dollar charged on their credit cards accrues interest. Until credit card interest rates decline, the financial stress will remain high.

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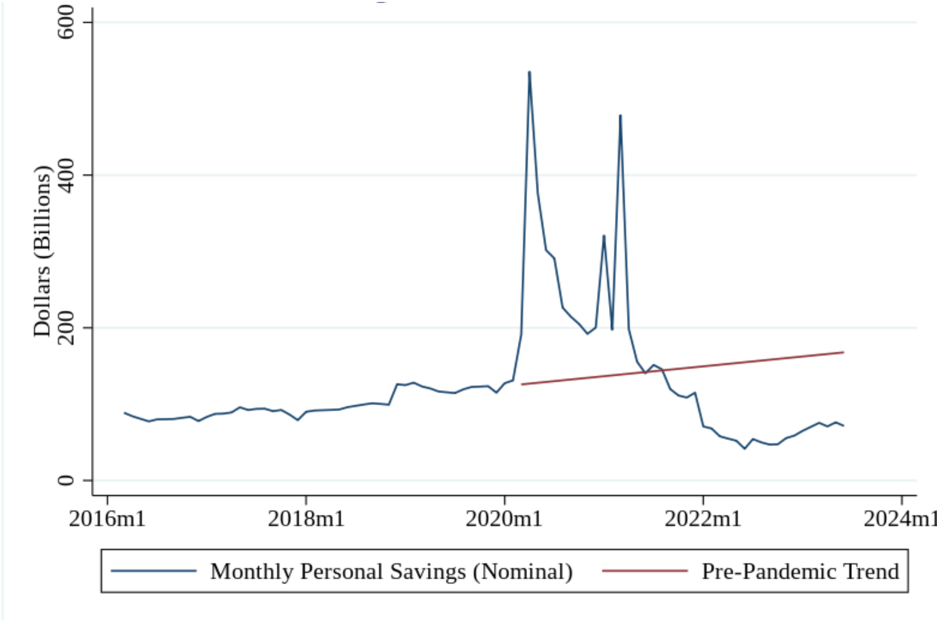
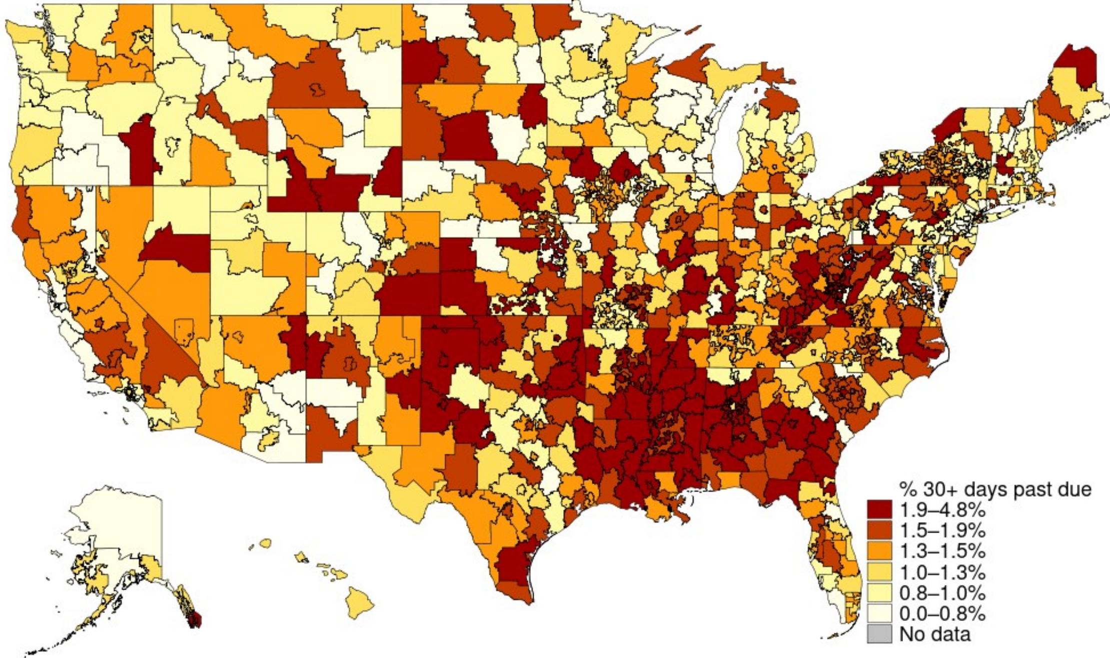
Appendix

Appendix Figure 1: Aggregate Personal Savings Relative to Pre-Pandemic Trend



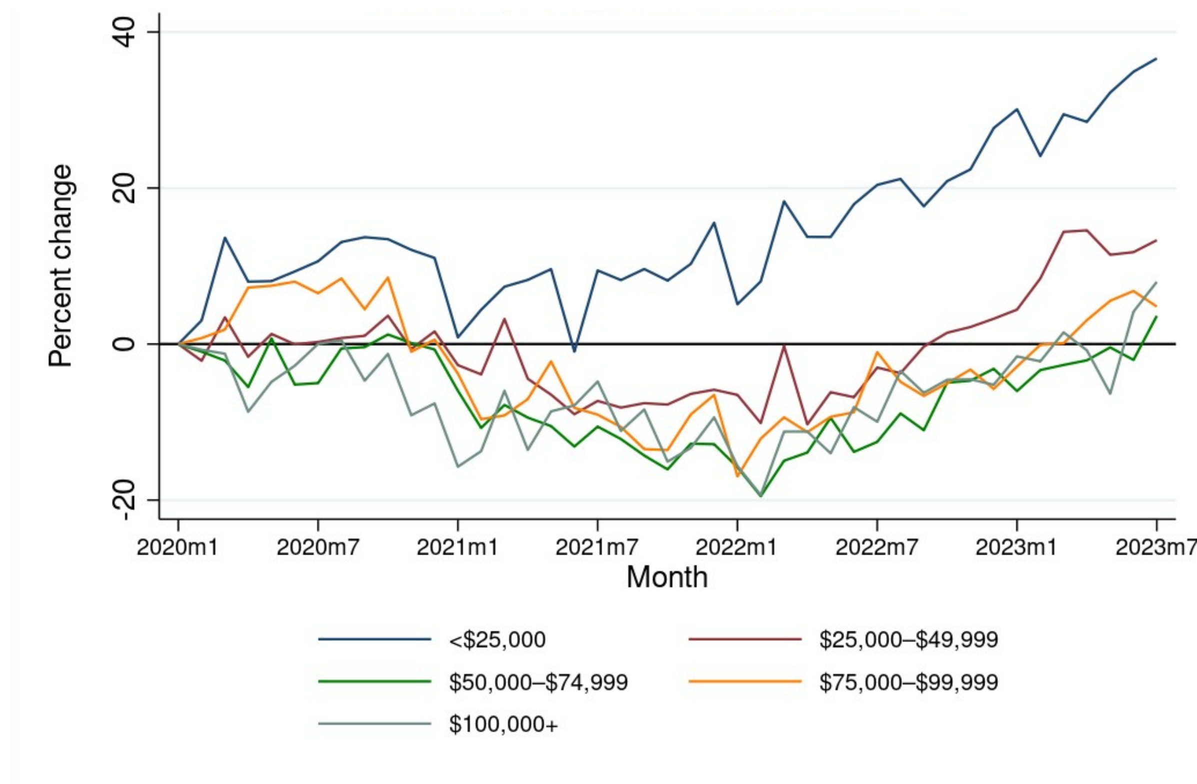
Note: “Excess” savings are defined here as the observed personal savings minus predictions based on the pre-pandemic (January 2016 to March 2020) trend. Data through June 2023. Calculations use data from the Bureau of Economic Analysis, retrieved from FRED, Federal Reserve Bank of St. Louis.

Appendix Figure 2: Percent of Credit Card Accounts 30+ Days Past Due in Each Zip Code, April 2021–July 2023



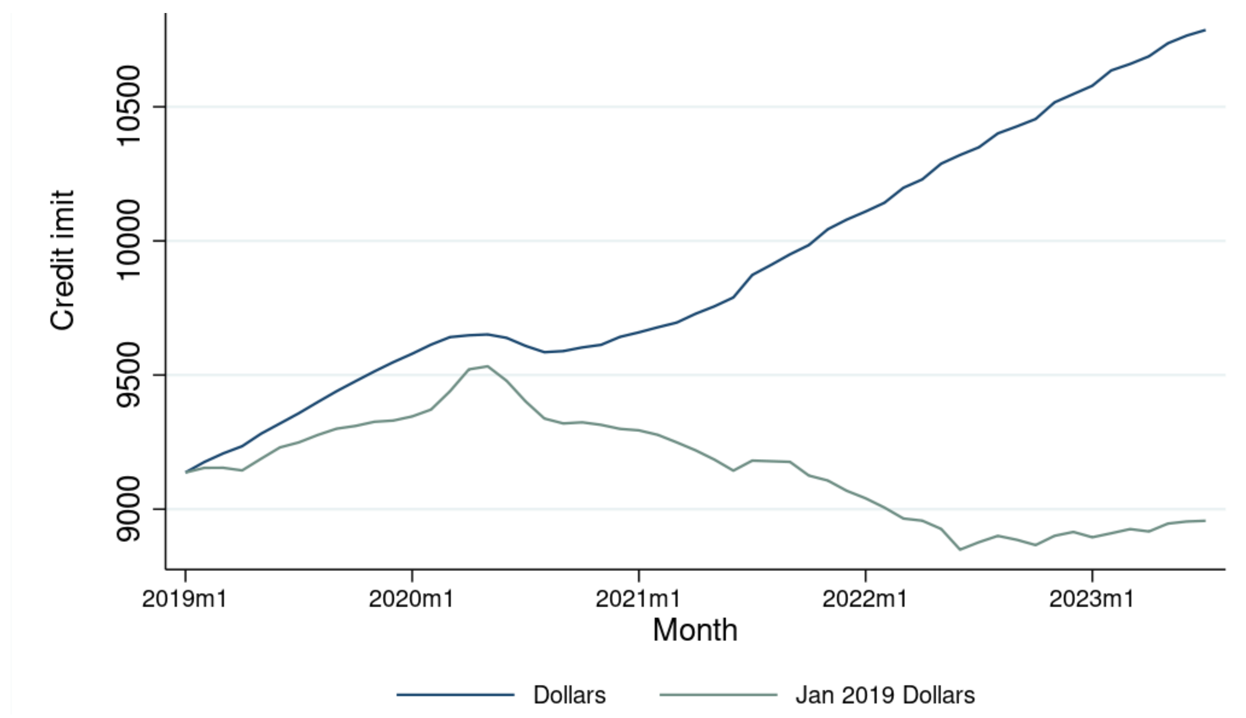
Source: Y-14M credit card account data.

Appendix Figure 3: Percentage Change in the Average Balance on Delinquent Accounts Based on Nominal Dollar Values, January 2020–July 2023



Source: Y-14M monthly data on credit card accounts.

Appendix Figure 4: Average Credit Limit over Time, Nominal and Adjusted for Inflation



Source: Y-14M monthly data on credit card accounts.

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[1] https://www.newyorkfed.org/microeconomics/hhdc.html. Note that the Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP/Equifax) data are at the cardholder level, while the Y-14M data are at the account level, making a direct comparison between the two data sets difficult.

[2] We define *delinquent balances* as balances that are at least 30 days past due (DPD).

[3] The Board of Governors of the Federal Reserve System collects Y-14M data monthly from bank holding companies with total consolidated assets of $100 billion or more to use in supervisory capital assessments and stress-test models. Bank holding companies are required to report information on all the credit card accounts they have on file. The accounts reported in the Y-14M data represent about three-quarters of the total bank card balances in the United States. For more information about the Federal Reserve Y-14M data-collection process, see the Board of Governors website, Reporting Forms, https://www.federalreserve.gov/apps/ReportingForms/.

[4] Estimates were provided by the JPMorgan Chase Institute. *Cash buffers* are defined as an individual's combined checking account and savings account balances divided by their rate of spending. The institute defines an individual's rate of spending as their median monthly checking account outflows less transfers over the preceding 12 months. For further details on calculations, see Wheat and Eckerd (2023).

[5] President Biden tried to extend the student loan forgiveness plan, but the plan was rejected by the Supreme Court in June 2023. Instead, President Biden expanded income-based repayment options, which are expected to take effect by July 1, 2024. However, this loan forgiveness will come slowly through a complex new repayment plan called the Saving on a Valuable Education (SAVE) plan. See Edward Conroy, "Biden Administration Launches New SAVE Student Loan Repayment Plan," *Forbes*, August 1, 2023.