Key takeaways

- Student loans form a significant part of US household debt and are a key way the higher education system is funded. Loans are increasing as a share of overall student aid, with most being Federal.
- Federal student repayments were paused over the pandemic but are now due to resume. What will be the impact on consumers? Here we answer six frequently asked questions, using the latest data as a guide.
- According to Bank of America internal data, we find that households with income above $100K that stopped paying their student loan debt over the pandemic generally did not ramp up their spending, but instead accumulated deposits at a faster pace than the rest of the population.
- However, it appears that the resumption of student loan repayments will be more challenging for the lowest-income groups, particularly as their spending appears to have been supported by the moratorium, and their deposit growth was slower than the rest of the population. The US Administration’s announced ‘on-ramp’ should help smooth the adjustment period.

Q1. How important are student loans in US education funding?

In the US, many students pay for their college educations by taking on debt. In aggregate, student loans are a significant part of overall household debt (Exhibit 1). In Q2 2023, the Federal Reserve Bank of New York (FRBNY) household debt report estimated student loans at $1.6tn, which is higher than outstanding credit card debt ($1.0tn) and comparable to the amount outstanding of auto loans ($1.6tn).

Exhibit 1: Total US household debt, by type ($ trillions, to Q2 2023)

Student debt is a significant part of overall household debt

Exhibit 2: Share of graduates with debt at graduation (%)

The US is not an outlier – many graduates finish school with debt

It’s important to note, however, that the US is not an outlier in terms of students taking on debt to pay for higher education. Many advanced economies grapple with how to fund this and an increasing reliance on student loans is common. As Exhibit 2 shows, several countries have higher shares of graduates leaving higher education with debt than the US, according to OECD data.
Loans have been a significant component of US student aid for a long period (Exhibit 3), though their share in total aid declined in the early 2000s, before climbing again in the 2010s. The share of federal loans is much larger than non-federal loans (Exhibit 4). Federal loans are broadly subsidized and unsubsidized; the former qualify for a period in which the US Department of Education (ED) pays the interest and principal repayments are deferred.

Exhibit 3: Composition of US student aid (%)
Total US student aid has shifted away from grants and towards loans

Exhibit 4: Composition of US student loans in 2021 (%)
The clear majority of student loans made in 2021 are estimated to be Federal

Q2. Who holds student loan debt?

With federal loans being the dominant source of student funding, a large number of people in the US are paying off student debt accumulated while studying – sometimes for a long time after they leave education. The ED estimates there were 43.4 million holders of federal student debt in Q3 2023.

Exhibit 5 illustrates that a relatively large proportion of borrowers have outstanding debt of less than $20,000. However, a significant ‘tail’ of borrowers have a larger amount of outstanding debt. This means that while the median federal loan debt lies between $10K and $20K, the mean amount is close to $40,000.

Exhibit 5: Proportion of federal student loan borrowers by outstanding debt size (% 2023 Q3)
Over half of borrowers have an outstanding debt of less than $20K.

Naturally, many people pay off their student debt as they get older, which tends to mean the distribution of student debt holders skews younger (Exhibit 6). In terms of the share of dollars outstanding, average federal student loan debt tends to rise with age – partly reflecting that people who pursue advanced degrees will graduate later (Exhibit 7) and capitalization of interest.
Exhibit 6: Distribution of federal student debt borrowers by age (%, 2023 Q3)
Just under half of debt is held by people below the age of 35

Exhibit 7: Average federal student loan debt by age ($ 000s, 2023 Q3)
Older age groups tend to hold higher average student loan debt

Source: US Department of Education

Looking at the distribution of overall student debt by income, Exhibit 8 shows that most student debt is held disproportionally by those with higher incomes. The top 40% of the income distribution holds over half of the outstanding balance of student debt. Moreover, the average student debt amount rises with income – those in top 20% of the income distribution hold an average debt of $50,000.

Exhibit 8: The distribution of student debt outstanding by quintile of income (2019, %) and average debt of student loan holders ($)
Over half of the outstanding balance of student debt is held by those in the upper 40% of the income distribution

Source: Federal Reserve Survey of Consumer Finances

A significant proportion of student debt is held by advanced degree holders. Those with post-graduate degrees hold over 50% of student debt, according to the Brookings Institute. These higher degrees tend to be associated with higher-income levels. The federal government started offering loans to graduate and professional students (Grad PLUS loans) from July 2006, which cover the full costs of graduate education.
Q3. How important was the student loan payment pause for consumers?

Federal student loan repayments were paused over the pandemic, originally starting in March 2020, under the CARES ACT and renewed several times. Over this ‘moratorium’ period, the interest rate on these loans was set at zero and principal payments were deferred. However, this pause is now coming to an end – Interest started to accrue from September 1, and payments will be due to start again in October.

The Bureau of Economic Analysis (BEA) has estimated the suspension of student loan interest rates as being worth around $38bn annually, which is equivalent to around 0.2% of aggregate personal income. At this level of the total economy and measured GDP, the ending of this student loan repayment pause is therefore likely to be a small drag. BofA Global Research estimates this impact at around 0.1% of GDP.

However, for some individuals paying off loans, the repayment pause may well have felt significantly larger, given their ability to defer principal payments too, freeing up cash flow for other spending. Exhibit 9 shows that, according to Bank of America internal data, most customers stopped making student loan payments over the suspension period.

Bank of America data also indicates that the median student loan repayment immediately prior to the moratorium was around $180, while the mean payment per household was around $550 per month. This latter figure is larger than the median due to some households paying relatively large amounts (presumably reflecting larger original loans), as well as the fact that households may make more than one student loan payment per month.

With average household consumer spending in 2022 around $73,000, as estimated by the Bureau of Labor Statistics (BLS) Consumer Expenditure Survey, the deferment of student loan repayments could be worth around 9% of annual spending for the average impacted household. Note, we do not know whether households are choosing to pay off more than they were required to at that time.

Exhibit 9: Number of households making student loan payments (Index 2019=100), according to Bank of America internal data
A clear majority of households took advantage of the federal student loan pause

Exhibit 10: Median and mean student loan payments, and average per household ($ per month) according to Bank of America internal account data
The average student loan repayment per household in Q1 2020 was around $550 per month

Source: Bank of America internal data

Q4. Have people started repaying off their loans early?

A surge in the deposits from the Department of Education (ED) to the US Treasury led to some suggestions that households may have decided to resume making their student loan repayments ahead of the actual deadline (Exhibit 11). This, in turn, might be taken as a positive sign for the health of consumers.

However, as we shared in the September Consumer Checkpoint, using Bank of America internal data we found that the rise in the value of student loans repayments in August 2023 reflected a relatively small number of customers making large lump-sum repayments to avoid the re-start of interest accrual on student loans from September (Exhibit 12), rather than some more broadly-based resumption of loan repayments.
The most recent daily data from the US Treasury shows a drop back in deposits from the Department of Education, which tends to support the view that this early repayment surge was largely related to the resumption of interest accrual. As such, there is little we can take from this spike in repayments to infer how consumers will handle the restart of repayments and it seems plausible to continue to believe the resumption will be a small headwind to consumers.

Exhibit 11: US Department of Education deposits into the Treasury General Account (Daily, $Million, Data through to 22nd September 2023)
DoE payments to the Treasury surged in late August, but now appear to be declining.

Exhibit 12: Households making student loan repayments using Bank of America internal data (index, January 2020=100)
The jump in payments to student loans appears mainly due to a small number of households making large payments.

Q5. How did households use the money saved from the moratorium?
For most households the resumption of repayments is yet to come. But did households that paused their repayments over the moratorium period use this as a potential boost to their spending?

The answer appears to be ‘no.’ Using Bank of America internal data, we see that households that made student loan payments in the first quarter of 2020, either continued making payments or appear to have deferred them. We then look at their credit and debit card spending alongside overall card spending. Exhibit 13 shows that those households identified as having deferred student loan payments actually saw a smaller rise in card spending per household than both those that continued making payments and overall average card spending.

Exhibit 13: Total card spending per household, including for sample of households with continued or deferred making student loan payments (2019=100)
Those households deferring payments of student loans appear not to have increased their spending by more than other groups.
If households that deferred their student loan payments over the moratorium did not appear to increase their spending compared to other groups, did they increase their savings instead? Based on Bank of America internal data, we find this may be the case for higher-income groups. Exhibit 14 shows median deposit balances relative to January 2020 for all households and for those identified as having stopped making student loan payments as of April 2020. For cohorts with incomes above $100K per year, the deposits of those households deferring loan payments rose faster than average.

Exhibit 14: Median deposit balances of households with student loan payments compared to all households, by income (indexed, Jan 2020 = 100)

Higher-income cohorts who stopped paying their student loans appear to have accumulated deposits at a faster pace than households overall.

However, for lower-income cohorts, particularly those with incomes below $50K, there appears to be some evidence that their deposit growth was lower than the average customer in that income cohort. And, given households in this lower-income cohort tend to have lower absolute levels of deposits, it seems likely that the resumption of student loan payments could be particularly challenging for them.

Exhibit 15 shows total card spending for households with income below $50K deferring loan payments relative to overall total card spending in the below $50K income group. It suggests that the group that deferred paying their loans still has a relatively elevated spending level compared to the overall card spending of this income cohort. Over 2019, before the moratorium, this group tended to spend around 50% more than the average for lower-income households. But in 2023 this figure is around 80%.

Given that lower-income households deferring student loan payments tended to accumulate a lower percentage rise in deposits while also appearing to spend more than average lower-income households, there could plausibly be some significant downside risk to spending in this income group, if they had to resume paying their student loans immediately.

The US Administration’s announcement of an ‘on-ramp’ to the resumption of student loan repayment is likely to help reduce much of this risk. Over the on-ramp period, borrowers who miss payments will not be reported to credit bureaus and student loans will not be considered in default. Additionally, while payments and interest will still accrue over the on-ramp period, interest will not capitalize at the end of the period. Alongside the on-ramp, the Administration also announced an income-driven repayment plan which may help borrowers who qualify on an ongoing basis via lower monthly repayments. Employer paid student loan repayments may also help some other borrowers with the transition.

Q6. Could repayment problems lead to a decline in credit supply to consumers?

Over the pandemic, most households were in a stronger-than-usual position to service their consumer debt balances, due to the provision of government stimulus as well as policies such as the student loan repayment pause.

As Exhibit 16 shows, according to the Federal Reserve, delinquency rates were exceptionally low over the pandemic. And while there has been a move higher in ‘new’ delinquencies on other household loans recently, particularly credit card and auto loans, the increase was largely anticipated by lenders.
But unsurprisingly, many student loan holders also hold other forms of household debt, especially credit card (Exhibit 17). And the resumption of student loan repayments could potentially represent an additional headwind to overall repayments for some already stressed borrowers.

Exhibit 16: New delinquent balances by loan type, New York Federal Reserve data, (% 30-days delinquent or more)
There has been a normalization in delinquency rates following the drops over the pandemic

Exhibit 17: Type of debt held by respondents with student loans
The end of the repayment pause could impact borrowers’ ability to make payments on other debt

In the near-term, it seems probable that the most squeezed consumers would be able to make use of the student loan repayment ‘on-ramp.’ BofA Global Research has also argued that they do not expect the resumption of student loan payments to cause a tightening in the underwriting standards of consumer finance providers by itself – they point to generally healthy consumer balance sheets and the fact that most consumer finance companies have already increased their credit reserves given a more uncertain macro backdrop.

So, it does not look likely that the overall supply of credit to consumers will be significantly negatively impacted by the resumption of student loan repayments from October – though this clearly warrants vigilance going forward.
Methodology

Selected Bank of America transaction data is used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used is not comprehensive; it is based on aggregated and anonymized selections of Bank of America data and may reflect a degree of selection bias and limitations on the data available.

Any payments data represents aggregated spend from US Retail, Preferred, Small Business and Wealth Management clients with a deposit account or credit card. Aggregated spend include total credit card, debit card, ACH, wires, bill pay, business/peer-to-peer, cash and checks.

Any Small Business payments data represents aggregate spend from Small Business clients with a deposit account or a Small Business credit card. Payroll payments data include channels such as ACH (automated clearing house), bill pay, checks and wire. Bank of America per Small Business client data represents activity spending from active Small Business clients with a deposit account or a Small Business credit card and at least one transaction in each month. Small businesses in this report include business clients within Bank of America and generally defined as under $5mm in annual sales revenue.

Unless otherwise stated, data is not adjusted for seasonality, processing days or portfolio changes, and may be subject to periodic revisions.

The differences between the total and per household card spending growth rate can be explained by the following reasons:

1. Overall total card spending growth is partially boosted by the growth in the number of active cardholders in our sample. This could be due to an increasing customer base or inactive customers using their cards more frequently.

2. Per household card spending growth only looks at households that complete at least five transactions with Bank of America cards in the month. Per household spending growth isolates impacts from a changing sample size, which could be unrelated to underlying economic momentum, and potential spending volatility from less active users.

3. Overall total card spending includes small business card spending while per household card spending does not.

4. Differences due to using processing dates (total card spending) versus transaction date (per household card spending).

5. Other differences including household formations due to young adults moving in and out of their parent’s houses during COVID.

Any household consumer deposit data based on Bank of America internal data is derived by anonymizing and aggregating data from Bank of America consumer deposit accounts in the US and analyzing that data at a highly aggregated level. Whenever median household savings and checking balances are quoted, the data is based on a fixed cohort of households that had a consumer deposit account (checking and/or savings account) for all months from January 2019 through the most current month of data shown.

Bank of America credit/debit card spending per household includes spending from active US households only. Only consumer card holders making a minimum of five transactions a month are included in the dataset. Spending from corporate cards are excluded. Data regarding merchants who receive payments are identified and classified by the Merchant Categorization Code (MCC) defined by financial services companies. The data are mapped using proprietary methods from the MCCs to the North American Industry Classification System (NAICS), which is also used by the Census Bureau, in order to classify spending data by subsector. Spending data may also be classified by other proprietary methods not using MCCs.

Generations, if discussed, are defined as follows:

6. Traditionalists: pre-1946
Any reference to card spending per household on gasoline include all purchases at gasoline stations and might include purchases of non-gas items.

Additional information about the methodology used to aggregate the data is available upon request.

**Contributors**

**David Michael Tinsley**
Senior Economist, Bank of America Institute

**Sources**

**Li Wei**
Senior Vice President, Global Risk Analytics

**Kimberly Warren**
Senior Vice President, Global Risk Analytics

**Mel Roasa**
Vice President, Digital and Marketing

**Kurt Stubenhofer**
Senior Vice President, Digital and Marketing

**Theresa O'Neill**
Managing Director, BofA Global Research

**Mihir Bhatia**
Vice President, BofA Global Research
Disclosures

These materials have been prepared by Bank of America Institute and are provided to you for general information purposes only. To the extent these materials reference Bank of America data, such materials are not intended to be reflective or indicative of, and should not be relied upon as, the results of operations, financial conditions or performance of Bank of America. Bank of America Institute is a think tank dedicated to uncovering powerful insights that move business and society forward. Drawing on data and resources from across the bank and the world, the Institute delivers important, original perspectives on the economy, sustainability and global transformation. Unless otherwise specifically stated, any views or opinions expressed herein are solely those of Bank of America Institute and any individual authors listed, and are not the product of the BoFA Global Research department or any other department of Bank of America Corporation or its affiliates and/or subsidiaries (collectively Bank of America). The views in these materials may differ from the views and opinions expressed by the BoFA Global Research department or other departments or divisions of Bank of America. Information has been obtained from sources believed to be reliable, but Bank of America does not warrant its completeness or accuracy. Views and estimates constitute our judgment as of the date of these materials and are subject to change without notice. The views expressed herein should not be construed as individual investment advice for any particular client and are not intended as recommendations of particular securities, financial instruments, strategies or banking services for a particular client. This material does not constitute an offer or an invitation by or on behalf of Bank of America to any person to buy or sell any security or financial instrument or engage in any banking service. Nothing in these materials constitutes investment, legal, accounting or tax advice.

Copyright 2023 Bank of America Corporation. All rights reserved.