# AN ANLYSIS OF THE STUDENT LOAN MORATORIUM AND ITS CONCLUSION

By Nicholas Dolasinski

## ABSTRACT

For many years, the cost of attaining a college degree has grown far faster than the price inflation of other goods and services. As a result, student debt has become the second largest debt held by American households on average. The interest accrual on this debt and its required monthly payments were paused on March 27 of 2020 in response to COVID 19. Interestingly, most borrowers affected by the pause did not take this opportunity to pay down student loan balances. Instead, many borrowers used the increased liquidity to offset the costs of high inflation and take on more debt in other forms. Paused student loan borrowers now hold an average of $1,800 more in other debt than student loan borrowers whose payments were not paused. As payments and interest accrual resume for over 40 million borrowers, they will be forced to make some difficult consumption decisions or tap into their savings and lines of credit which luckily remain strong relative to pre pandemic levels. While borrowers appear well positioned for the coming payment resumption, student loans will act as a strong headwind for many American families in an already unstable time.

Monday of last week was a momentous day in my house. For years, my dog has greeted me at the door carrying his favorite orange rubber toy. The next half an hour or so would typically consist of a mix of fetch and chase all surrounding the possession of this little orange guy. To my surprise, last Monday I was greeted by a new toy. A long green caterpillar with the body of a knotted rope, the origins of which I will not question. Nonetheless, fetch has temporarily been replaced with tug of war (and of course the occasional game of chase).

Comparing options and making decisions is a fundamental experience to living. Whether the final result is Chinese food for dinner, tug of war with a caterpillar, or having access to electricity instead of gas for the month, the concept is the same. The resumption of student loan payments will force millions of Americans into an assortment of spending decisions they didn't have to consider for the past three years. Over the next few moments, we will dip our toes into the history, current reality, and potential implications of resuming payments on student debt in America.

## Education is Anything but Cheap

The cost of tuition in America has been steadily rising for decades. The average tuition and fees posted by public 4-year colleges in the U.S. has grown from $4,870 in 1992 to $10,940 in 2022, roughly 225% in 30 years[1]. Unfortunately, income growth has not matched this rate. During the same time period, the average household income of the top 20% of earners increased by 64% while income for the bottom 20% of earners only grew by around 17%[2]. There's a mixed bag of reasons that are driving this disproportionate tuition growth, an analysis of which can be viewed here. However, regardless of the reasons, the trend remains. The cost to gaining access to higher education and receiving a degree continues to grow which has forced people to rely more and more on student debt. As a result, student debt as a percentage of average installment debt held by individuals has grown from 24% on average in 1998 to 50% in 2019, surpassing average debt taken on for transportation purposes[3]. This puts student debt among the largest reoccurring drags on drags on consumption, second only to housing. Though, this hasn't been the case for the past 3 years.

## The Pause

On March 27, 2020, the United States Department of Education issued a pause on the collection and accruing interest of all outstanding student loans in response to the employment situation the COVID-19 pandemic caused. As a result, some 45 million Americans suddenly had, on average, an additional $393 of disposable income per month[4]. Though, realistically that's not what the majority of households felt as the median monthly payment is $222 a month.

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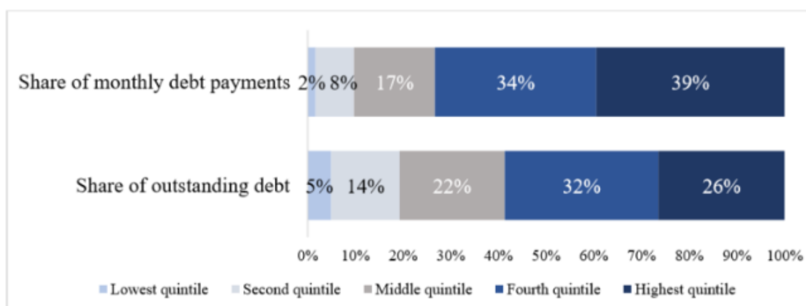
[1] CollegeBoard. "Trends in Higher Education Series: Trends in College Pricing 2022". CollegeBoard. 2022. 12
[2] CollegeBoard. "Trends in Higher Education Series: Trends in College Pricing 2022". 24
[3] Board of Governors. "The Survey of Consumer Finances". The Federal Reserve System. 2019. Scf2019 Table 15.
[4] Farrington, Robert. "What is the Average Monthly Student Loan Payment for US Borrowers?". The College Investor. 2023

Regardless, $200-$300 is not valued the same by every individual and thus will have different impacts on consumption depending on the demographics actually holding the debt.

Not surprisingly, the majority of student debt is held by individuals in the highest income brackets as these are oftentimes the most educated members of society. As can be seen in Figure 1.1 on the right, in 2019 borrowers in the top 40% of income earners held 73% of the monthly debt payments paid on student loans[5]. This represents borrowers earning roughly $100,000 or more at that time[6].

**Share of debt and of debt payments by income quintile, 2019**




*Source: Board of Governors of the Federal Reserve System (2017, 2020), Survey of Consumer Finances 2016 and 2019,*

*Figure 2 (Source: Board of Governors)*

As touched on above, people spend varying percentages of additional income they receive depending on their unique financial situation and personal preferences. This desire to spend is called a person's Marginal Propensity to Consume or MPC. A newer study using updated consumption data estimates the MPCs of consumers in the U.S. sorted by income quintile to be 0.218, 0.166, 0.002, 0.002, and 0.015 (ordered lowest earning quintile to highest)[7]. Meaning that for every additional dollar they receive, members earning the top 20% of income have on average spent 1.5% of it on goods and services. But has this translated to actual consumer behavior since 2020? How did consumers spend the money they no longer had to spend on student debt payments?

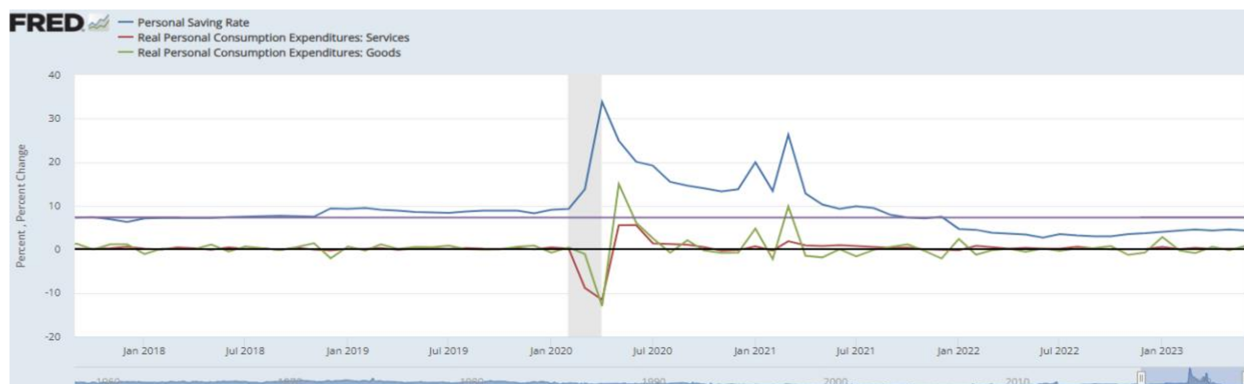



*Figure 1 (Source: US Bureau of Economic Analysis)*

[5] Board of Governors. "The Survey of Consumer Finances"

[6] CollegeBoard. "Trends in Higher Education Series: Trends in College Pricing 2020". CollegeBoard. 2020. 24

[7] Fisher, Johnathan, David Johnson, Timothey Smeeding, and Jeffry P. Thompson. "Estimating the Marginal Propensity to Consumer using the Distributionms of Income, Consumption, and Wealth." Federal Reserve Bank of Boston Research Department. 2019. No. 19-4

In this case, economic theory only supports the movement of money we observed in the first half of 2020. Stepping back for a moment, household savings as a whole grew at an incredible rate in 2020 as can be seen in figure 2 below. In late March, individuals were faced with the stark reality of a global pandemic and half functioning economy. This caused panic throughout markets globally and public sentiment in the U.S. dropped suddenly as demonstrated by the University of Michigan Index of Consumer Sentiment shown in figure 3 on the right[8]. Consumers slowed spending on both goods and services by nearly 20%, choosing instead to save both their typical disposable income and the additional funds they had from various government relief programs (such as paused student debt payments) for the first 5 months of the year. However, this was short lived. In March of 2020, the first wave of stimulus checks hit consumers checking accounts significantly boosting sentiment. As individuals became more assured in their future ability to financially survive and in the government as a metaphorical backstop, spending rebounded aggressively in April and May. With that said, despite elevated spending relative to the first few months of COVID, savings rates remained historically high until March of 2021.

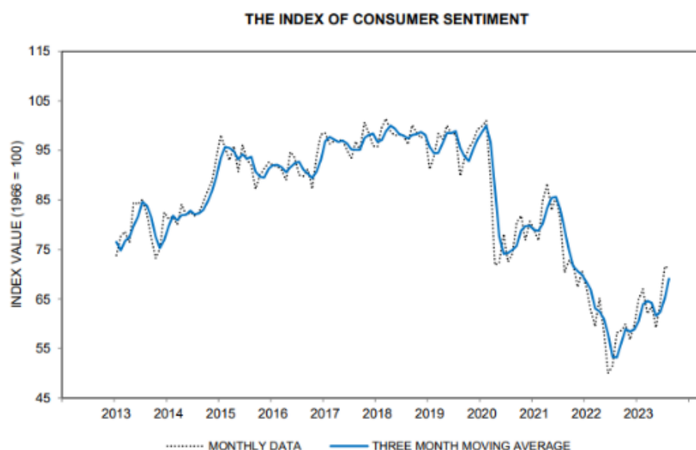


*Figure 3 (Source: University of Michigan)*

The next two years thereafter would go on to tell a much different story. As the world opened back up and people went back to work, spending normalized while prices surged in response to the extra money pumped into the economy. This caused stubborn inflation (which peaked at 9.1% in June 2022) and forced consumers to spend a greater percentage of their income (despite high wage growth) causing the savings rate to steadily fall between June 2021-June 2022 as is evident in figure 2. Additionally, consumers slightly tapped into the savings they had built up from the extra revenue and less debt responsibility that had defined 2020 and the early half of 2021. However, consumers post 2021 mostly relied on income and credit (shown in Figure 4 below) to offset the costs of high inflation explaining why the savings rate has remained below pre-pandemic standards (demarked by the horizontal purple line in figure 2 on page 2) for some time.

[8] University of Michigan. “Survey of Consumers Index of Consumer Sentiment”. Univ of Michigan. 2023

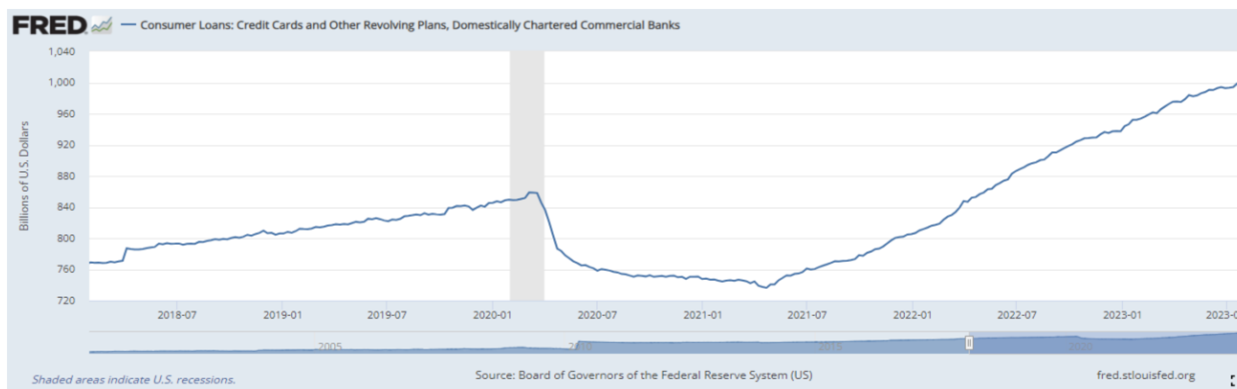



*Figure 4 (Source: Board of Governors)*

As a consequence of the macro-environment described above, student loan borrowers were unable to extract much benefit from the pause on student loan payments and growing interest. According to a survey published by the Pew Research Charitable Trust in 2021, only 21% of borrowers felt that they were financially better off than they were a year ago[9]. The reason for this lies in the financial hardship price inflation placed on households, even in 2021. Take a look at figure 5 showing question 16 of the same survey below, for many households the extra cash not paying student debt provided never made it to their disposable income bucket as it was necessary to simply maintain the lifestyle they were accustomed to[10].

**Based on student loan borrowers who have not made payments on their loans during the payment pause (N=473)**

B16. Since the pause began, do you believe the money that you would have spent on loan payments is going mostly for:

| | % |
|---|---|
| Savings | 9 |
| Needed expenses (e.g., food, rent, mortgage, utilities) | 59 |
| Something non-essential I would not have bought if I didn't have the extra money | 1 |
| Paying down other debt (e.g., credit card debt, medical debt, auto loans) | 27 |
| Something else | 3 |
| Refused/Web blank | 1 |

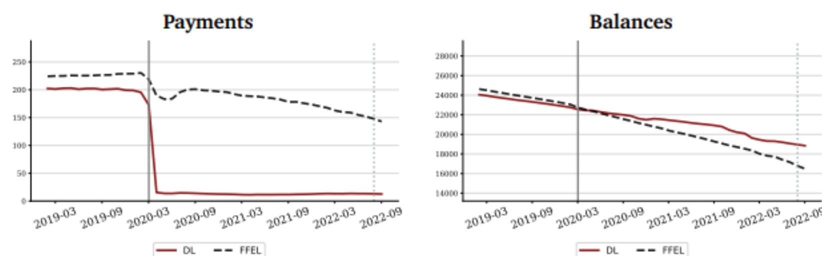
*Figure 5 (Source: Pew Charitable Trusts)*

Supporting this theme, at the time of the survey, 75% of households had not made payments to lower their debts and only 12% of borrowers in default had worked with the Department of Education to get out of default[11]. Of course not all student loan payments were paused (only those whose funds were supplied by the Federal government initially: Direct Loans). Though, the overwhelming majority (over 92%) did experience the pause. So economists at the University of Chicago decided to compare the spending behavior of student loan borrowers whose debt was paused (those with DL loans) to those whose debt payment was not paused (with Federal Family Education Loans or FFEL) to find the ultimate impact the extra liquidity from the student loan pause had on borrowers' financial decisions. The results are fascinating.

[9] Pew Charitable Trusts. "Student Borrowers Survey". SSRS. 2021. 4
[10] Pew Charitable Trusts. "Student Borrowers Survey". 13
[11] Pew Charitable Trusts. "Student Borrowers Survey". 13

As can be seen in figure 6 on the right, student borrowers who experienced the pause did not take the opportunity to reduce their student debt[12]. On average, borrowers almost completely stopped student loan payments which has subsequently left paused borrowers with an average student loan balance $1,500 higher than non-paused borrowers as of September of 2022 (shown in figure 7 on page 5). Not only did the vast majority of borrowers not pay down their existing debt, but they added to it! The research paper finds that, “Relative to borrowers who had to continue paying their loans, borrowers who had a pause in their payments sharply increased mortgage, auto, and credit card borrowing”[13]. The economists go on to conclude that this increased credit demand is driven by an easing ability to service these new loans[14]. Figure 6, on the next page, graphs the history of the difference between the DL and FEEL loans’ payments and balances; a full picture of which was shown above in figure 5. The “Payments” graph in figure 6 thus shows the average monthly liquidity difference throughout the pandemic that DL borrowers enjoyed over FFEL borrowers which ultimately allowed for paused borrowers to take on other forms of debt.

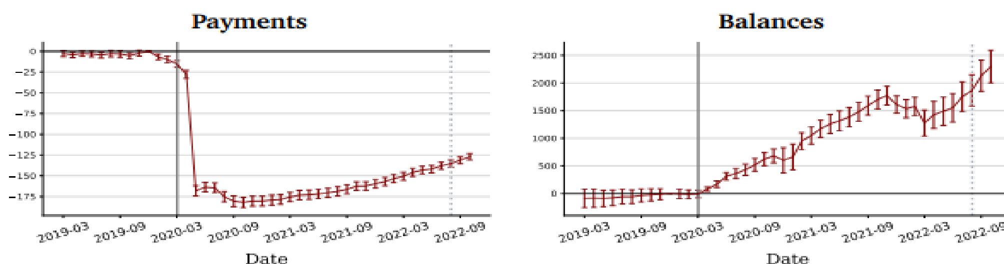
**Figure A.1: Student Loan Balances and Payment**




Notes: This figure shows mean student loan payments and balances for student loans, broken down by DL and FFEL borrowers. The solid line shows the month before the payment moratorium announcement, while the dashed line shows the month before the forgiveness announcement. Source: TransUnion

*Figure 7 (Source: Dinerstein, Michael. Et al.)*

**Figure 1: Student Loan Balances and Payments**




Notes: This figure shows the coefficients $\beta_t$ from the OLS regression $y_{it} = \sum_t \beta_t Eligible_i + \mu_i + \tau_t + \epsilon_{it}$, where $y_{it}$ is student loan balances or payments, along with a 95% confidence interval. We include fixed effects for individual and initial loan payment decile. The outcome is labelled above each panel. The solid line shows the month before the payment moratorium announcement, while the dashed line shows the month before the forgiveness announcement. Standard errors are doubled clustered at the repayment cohort level. Source: TransUnion

*Figure 6 (Source: Dinerstein, Michael. Et al.)*

[12] Dinerstein, Michael, Constantine Yannelis, and Ching-Tse Chen. “Debt Moratoria: Evidence from Student Loan Forbearance”. Becker Friedman Institute for Economics at UChicago. 2023. 24

[13] Dinerstein, Michael, Constantine Yannelis, and Ching-Tse Chen. “Debt Moratoria: Evidence from Student Loan Forbearance”. 15

[14] Dinerstein, Michael, Constantine Yannelis, and Ching-Tse Chen. “Debt Moratoria: Evidence from Student Loan Forbearance”. 15

Summary (1/2)

The cost of postsecondary education has outpaced inflation and wages forcing students and their families to rely more and more on student debt. Student debt has grown to be one of the largest financial responsibilities for Americans creating a large drag on consumption. In March of 2020, all federally owned student debt payment collections and accruing interest was paused costing the US government an estimated 195 billion dollars from inflation and the lost interest revenue over the past 2 and a half years[15]. Initially, affected borrowers saved their extra liquidity driven by both their typical consumer behavior and fear from the unknown future of markets and the world. However, this prioritization of saving did not last long as government intervention rallied consumer sentiment and encouraged a return to consumption. Rebounding demand from the huge amount of stimulus the government provided alongside significant global supply shocks propelled price inflation from both sides. The sheer size of this inflation quickly ate away at elevated consumers wages lowering the savings rate and forcing many consumers to take on more debt to maintain the lifestyle they had previously enjoyed. Student loan borrowers whose payments and interest were paused held uniquely high liquidity allowing them access to more credit which they took full advantage of. As a result, student loan borrowers did not take the opportunity to pay down existing student loan debt but instead used the extra liquidity to take on more debt in other forms to offset the costs of high inflation.

Payment Resumption

Federal Student Loan collections and accruing interest are set to resume in the next month (the exact date of payment resumption varies by debt servicer). While the ultimate implications of this will remain unknown for some time, we can take stock of the current financial health of student loan borrowers and of the market as a whole to better understand the magnitude that the pain of resuming student debt payments will impose on borrowers.

We have heard how student debt borrowers have used the pause on Federal student debt interest and payments to take on additional debt in other forms, but just how much debt have they taken on and in what form? The University of Chicago study goes on to determine the difference for the average monthly payment amount and the average overall balance of other loan types held by DL versus FFEL borrowers after the student loan payment pause as demonstrated in figure 7 on the next page[16]. It's quite obvious that DL borrowers who experienced the payment pause took on more debt than FFEL borrowers across the board, as the researchers claimed. Ultimately, by September of 2022, the paused borrowers owed an additional $1,800 in non-student loan debt and an average of $20 more per month[17].

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[15] Committee for a Responsible Federal Budget. "Student Loan Pause Could Cost $275 Billion". CFRB. 2022

[16] Dinerstein, Michael, Constantine Yannelis, and Ching-Tse Chen. "Debt Moratoria: Evidence from Student Loan Forbearance". 21

[17] Dinerstein, Michael, Constantine Yannelis, and Ching-Tse Chen. "Debt Moratoria: Evidence from Student Loan Forbearance". 21

It's worth mentioning that as part of the policies set to ease the transition back into student debt payment, borrowers who were in default on their federal student loans prior to the pause will be able to access the Fresh Start program which will clear the default status from their federal student loans[18]. Not only will this make them eligible for other student debt relief programs, but it will also better their credit score, and allow them to take on additional debt. It will definitely be worth monitoring the spending and credit behavior of the roughly 8 million borrowers who are eligible for this relief program to ensure that these historically bad borrowers don't over extend themselves.

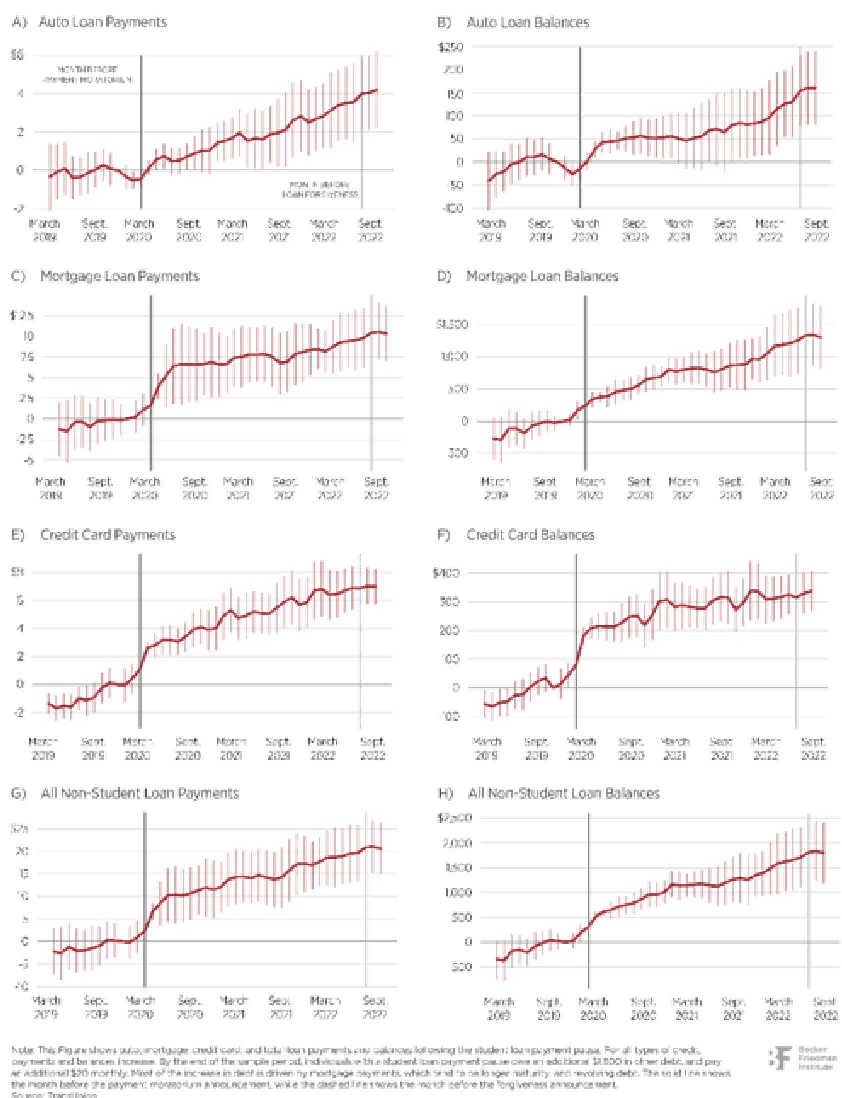



*Figure 8 (Source: Dinerstein, Michael. Et al.)*

With that in mind, the question now becomes how capable are student loan borrowers in being able to pay of their additional and paused debts and how might this affect their overall disposable income and consumption behavior?

[18] Minsky, Adam S. "Here's when Student Loan Payments Resume, and what Borrowers should do now". Forbes. 2023

Earlier, on page 3, we discussed how persistent inflation forced consumers to spend a greater percentage of their income and take on more debt to maintain their respective lifestyles. Luckily, household savings remained relatively untouched and are still strong when compared to historical levels thanks to the extreme saving which occurred in 2020 and the first half of 2021[19]. It's worth noting that the highest earning households have experienced the least amount of wage, savings, and checking balance growth. As we know, this group also happens to hold the majority of student loans which will be resuming soon.

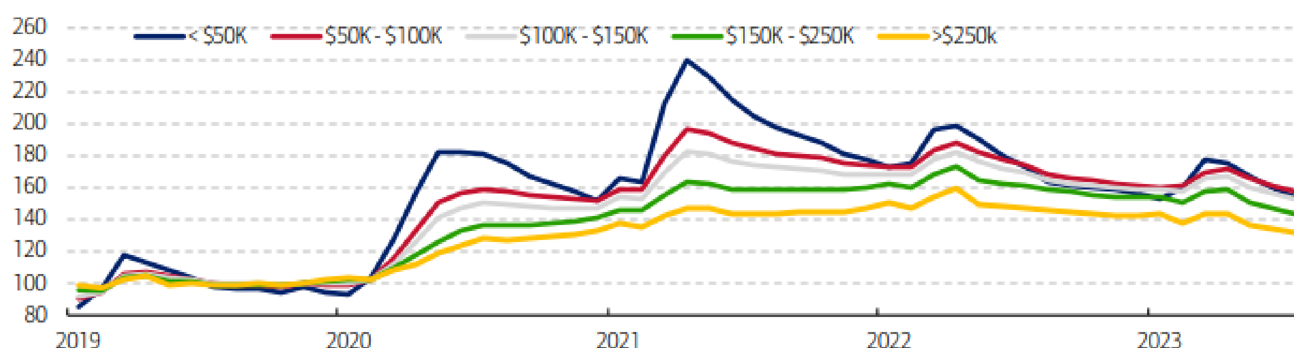


*Figure 9 (Source: Bank of America)*

While the strength of household savings offers some relief, the resumption of student debt payments and interest accrual will put downward pressure on these balances. According to a study done by Bank of America, the resumption of these payments will bring the average inflow-to-outflow ratio for accounts held by student loan borrowers into negative territory. Figure 10 on the right shows the current inflow-to-outflow ratio in blue and potential ratio when factoring in monthly student loan payments in red. As you can see, the ratio is expected to fall below 1 for all income groupings below households making more than $250,000[20]. Interestingly, this is the demographic that has experienced the most financial pain since 2020 which may turn out to be a positive

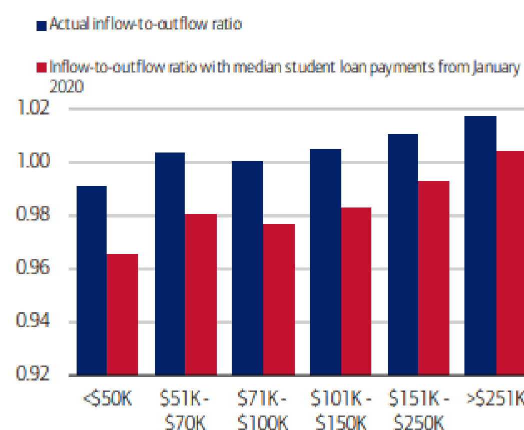


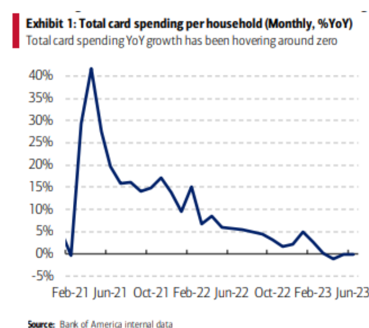
*Figure 10 (Source: Bank of America)*

[19] Tinsley, David Michael, Anna Zhau, Taylor Bowley, and Liz Everett Krisberg. "Consumer Checkpoint – In the Pink". Bank of America Institute. 2023. 4

[20] Tinsley, David Michael, Anna Zhau, Taylor Bowley, and Liz Everett Krisberg. "Consumer Checkpoint – In the Pink". 5

for the overall market as they appear to still be sufficient after the resumption of debt payments unlike other income groups. Regardless, borrowers whose inflow-to-outflow ratio falls below one will be forced to reduce their consumption and make difficult prioritization decisions unless they smooth consumption by further tapping into savings and credit.

Additionally, there exist broad pressures on consumers and the overall market which will also likely test this strength of savings balances. Consumption has continued to decrease across the economy in response to higher prices, seen in Exhibit 1 in Figure 11. This weakness is just starting to make its way into firm's revenues which is beginning to bleed into the demand for labor (reference figure 12). Additionally, higher interest rates are pressuring demand and investment squeezing companies from both sides. Going forward it will be crucial to monitor the health of business and the state of the labor market as this is the main pillar currently holding the economy out of a recession.



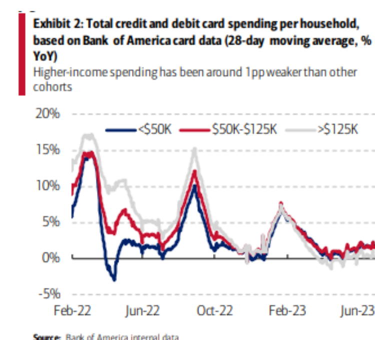
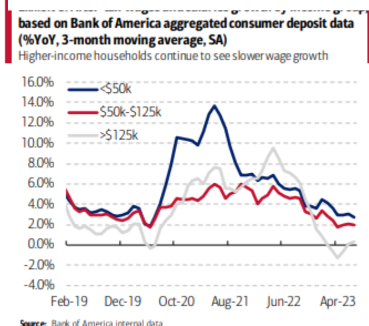




*Figure 11 (Source: Bank of America)*



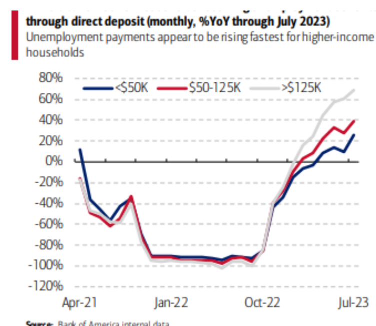




*Figure 12 (Source: Bank of America)*

Borrowers are well aware of these market headwinds and are predicting a rocky resumption of student loan payments. According to the same study referenced earlier conducted by Pew in 2021, 67% of student loan borrowers said they would find it difficult to resume payments, half of whom would find it "very" difficult[21]. Since then not much has changed in the minds of consumers. Credit Karma conducted a similar poll to the Pew research center wherein they asked Americans of varying demographics and financial backgrounds a series of pertinent monetary questions. In the survey they discovered that 45% of federal student loan borrowers expect to be delinquent before the forbearance ends[22]. Additionally, 53% of respondents with federal student loans said they were already struggling to pay other bills. Borrowers have and

[21] Pew Chaeitable Trusts. "Student Borrowers Survey". 13
[22] CreditKarma. "Federal Student Loan Borrowers are struggling to make ends meet, before payments resume in October". CreditKarma Press Room. 2023

continue to feel financially stretched as we head into the resumption of what is, for most borrowers, their second largest repeating bill.

One final point I would like to bring up is the fact that the Treasury Department for the United States is the owner of these student loans set to resume payments. Meaning that the money that will soon be paid to the Federal Government is essentially exiting the money supply, for the time being. This is spending that is essentially lost and is thus comparable to quantitative tightening. Just to put the size of this tightening in context, in 2019 the Federal Government collected $70.3 billion in student loan payments (32% or $22.4 billion of which were interest payments)[23]. This ended up being roughly 0.328% of GDP in 2019. That is not to say that the debt payment resumption will weigh on GDP by 0.328%. The ultimate impact the resumption will have on the economy will remain unknown until we are looking backwards. However, we can appreciate the weight this resumption places on millions of consumers and the subsequent headwind that the American economy will soon face.

Summary 2/2

Federal Student Loan Borrowers have used their boosted liquidity and subsequent credit rating since March of 2020 to take on more debt in other forms. This has left borrowers whose payments are on pause with an average additional responsibility of $1,800 in non-student loan debt. Luckily, household savings are still strong and may be able to buffer the impact of student loan resumption for a short period. Nonetheless, the resumption of student loan payments will push most borrowers' inflow-to-outflow ratio below 1 which will ultimately force these borrowers to make difficult spending decisions or tap into savings or lines of credit to finance the added responsibility. This will act as yet another headwind for consumption, subsequent business health, and the market as a whole.

Going forward, market participants should closely monitor the debt balances, net worth, unemployment rate, delinquency rate, inflow-to-outflow ratio, and savings balances of all student loan borrowers (particularly the 8 million with poor credit history and sudden access to credit) to observe in real time how the resumption of Federal Student Debt payments actually plays out.

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[23] Weissmann, Jordan. "An Extremely Important Statistic about Student Debt that has never been Published". SLATE Moneybox. 2021

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