

The Wider Implications of the U.S. Loan Forgiveness Programs on Borrowers and Lenders

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ABSTRACT

This paper examines the effect of U.S. student loan debt on household consumption, evaluating whether policy interventions such as forgiveness programs mitigate these effects. The paper uses a state-level panel regression to analyze the impact of student loan debt on consumer spending. The paper finds that student loan debt significantly constrains consumption, showing consistency with liquidity constraint and debt overhang mechanisms. The paper also finds that loan forgiveness programs increase consumer spending directly and indirectly, by partially offsetting the negative effect of debt. The paper concludes that the effectiveness of these policies depends significantly on design, with targeted efforts at relief proving to be more efficient than broad-based approaches.

Keywords: Loan forgiveness; liquidity constraints; household consumption; broad-based forgiveness; national policy

INTRODUCTION

Student loan debt in the United States has steadily increased in the 21st century, particularly in the last two decades. In Q3 of 2025, the total outstanding debt grew to \$1.83 trillion, making it the second largest driver of consumer debt, behind only mortgage debt (1). However, this problem is not restricted to the U.S. The UK has a similar issue, with their average debt per borrower being comparable to the U.S. This represents a widespread issue across the two countries, hence, indicating a need to understand how student loan debt influences household

economic behavior and the effectiveness of government policy. To see this, we compare the average student debt per borrower between the U.S. and UK during the years 2023-2024 in Figure 1 (2, 3).

The institutional design of loans and loan repayment policies in the U.S. higher education system differs substantially compared to the U.K. Therefore, although the UK had a significantly higher average debt per borrower than the U.S. in both 2023 and 2024 (\$59,700 vs. \$37,088 and \$59,800 vs. \$38,375, respectively), this comparison alone overstates the burden faced by UK borrowers. A critical factor to include is that the loans in the UK are typically written off after 30 years if not fully repaid. This behavior could allow borrowers to borrow more freely, as the long-term risk is not nearly as high as in the U.S., where debt can accumulate.

This is corroborated by Britton *et al.* (2019). The paper compares income-contingent student loan systems across countries (Australia, UK, and New Zealand)

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Accepted July 1, 2026

<https://doi.org/10.70251/HYJR2348.447280>

where the tuition fees are substantial and shows that repayment thresholds and forgiveness rules affect both borrower risk exposure and the potential distribution of subsidies (4).

Figure 2 displays both the sustained growth of student loan debt in the United States and how that debt is distributed across borrower age groups (2).

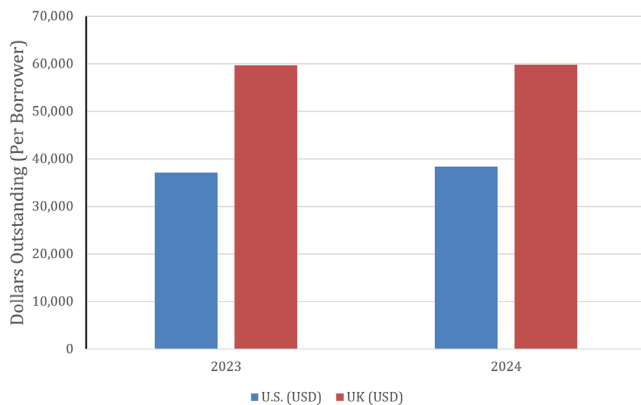


Figure 1. Average real student loan debt per borrower in the United States and United Kingdom, 2023–2024. Values are measured in U.S. dollars and represent the average outstanding student loan balance per borrower. The figure provides a comparison of individual student debt burdens between the U.S. and UK higher-education financing systems. Source: Federal Student Aid - Federal Student Loan Portfolio [2], UK Parliament - House of Commons Library [3].

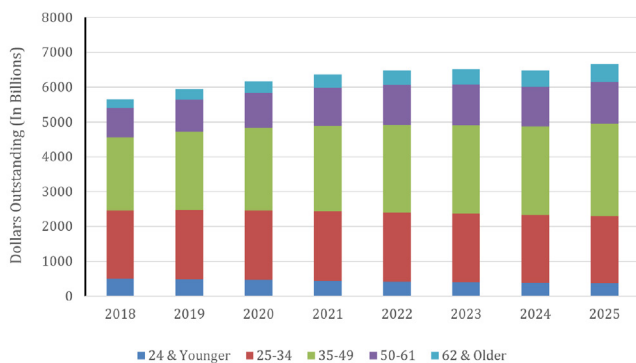


Figure 2. Total outstanding student loan debt in the United States by age group, 2018–2025. Values represent aggregate outstanding student loan balances (US\$ billions) held by borrowers in each age category in the United States. This figure indicates how total student loan debt is distributed across age group. Source: Federal Student Aid - Federal Student Loan Portfolio [2].

From 2018 to 2025, the total outstanding student loan debt increased steadily across the five age groups, which indicated that student loan debt was continually borrowed and that interest accumulated over time. Figure 2 shows that borrowers aged 25-34 and 34-49 consistently hold the largest share of outstanding student debt, suggesting that repayment obligations persist well beyond graduation and into their working years. In contrast, the tuition costs for older age groups were significantly smaller, partly due to the fact that they entered higher education when tuition costs were considerably lower: in 2000-01, tuition at a public 4-year institution averaged \$3,501, and in 2009-10 it averaged \$6717 (5).

There have been attempts to address the increase in outstanding student loan debt. Federal student loan repayments were first paused temporarily in March 2020 under the CARES Act, in order to stimulate consumption during an economic crisis. This pause was subsequently extended multiple times during the Trump and Biden administrations through 2023. The Biden administration, building on these earlier relief measures, introduced broader student loan forgiveness initiatives from 2022. There are many criticisms of Biden's broad-based forgiveness scheme, with its detractors arguing that flaws in its design may lead to regressive effects. Evaluating whether these policies meaningfully ameliorate the negative effects of student loan debt is critical for policy design.

Existing research has focused on the design of student loan policies and the behavioral responses to them by borrowers. Papers have showed that broad-based forgiveness policies could easily result in regressive outcomes depending on their design. They have also analyzed borrower behavior in the labor force in response to student loan forgiveness or periods of pauses in repayments (6-8). Though these papers provide valuable insights, there remains a need for empirical analysis that directly quantifies how student debt and policy implementations affect household consumption. Understanding this relationship is important because evidence on how student debt affects consumer spending remains limited, despite its importance for designing effective loan-forgiveness policies.

This paper addresses this concern by using a panel regression framework at the state-level to examine the relationship between consumer spending, student debt, and policy intervention. The model primarily estimates the effect of student loan debt on consumer spending, while also incorporating key control variables such as disposable income, unemployment, and housing

price growth. Finally, it also includes a policy variable capturing periods of forgiveness. This paper utilizes state-level data from the 50 U.S. states comprising the years 2003-2024 and includes 1071 observations.

The paper's findings indicate that student loan debt has significant constraints, consistent with liquidity constraints and debt overhang processes. Additionally, loan forgiveness policies have a positive effect on consumer spending and also dampen the negative effect of debt. Crucially, though, their effectiveness depends on their design – the results indicate that targeted policy interventions would be more effective than broad-based interventions as they target relief on borrowers who are the most liquidity constrained and have the highest marginal propensity to consume, rather than distributing relief to higher income borrowers with a lower marginal propensity to consume.

The rest of the paper is structured as follows. Section 2 provides an in-depth literature review of student loans and borrower responses. Section 3 introduces the panel regression and the variables used. Section 4 provides a regression analysis to estimate the effect of student loan debt on consumer spending. Section 5 concludes the paper, highlighting the key findings and policy implications.

LITERATURE REVIEW

This paper is at the intersection of two main topics: student loans, and the economic behavior of borrowers and lenders. While the literature on student loans explores how loan design, repayment schemes, and policies target borrowers and determine the cost of higher education, the second branch studies how these policies affect borrowers' labor market behavior and the cost to the government. Understanding how these mechanisms work is integral to evaluating the macroeconomic consequences of these policies.

Student Loan

In the U.S., approximately 92% of loans are federal (Dinerstein *et al.*, 2025) (6). In the case of the United States, it cannot directly subsidize this education for two reasons. Firstly, universal student loan subsidies or broad-based debt cancellation can result in huge fiscal costs. Moreover, the targeting of such policies is imprecise, leading to the relief targeting the wrong group of people (Catherine & Yannelis, 2023) (8). Since college completion directly correlates to higher lifetime earnings or predicted earnings (Dinerstein *et al.* 2025),

subsidization risks transferring the benefits towards individuals with higher expected income. Thus, the targeting can become regressive (6). Secondly, the U.S. relies heavily on tuition and loans. Recent research has compared the international higher education financing system with the U.S. through an equilibrium model. In the United States, higher education relies more heavily on private financing and student loans than in many OECD countries, where public subsidies reduce the need for borrowing (9). The U.S. system is thus classified as loan-centric.

Moving on, Dinerstein *et al* studied the policy of broad-based student loan forgiveness under the Biden administration (6). However, they found the scheme to be regressive, benefiting borrowers with higher monthly earnings. This is because the policy was based on adjustments to existing programs rather than new income-targeted relief. The largest loan discharges arose from IDR payment adjustments. Additionally, Public Service Loan Forgiveness (PSLF), also contributed to forgiveness being dependent on previous public sector employment and repayment history. Thus, payment relief was disproportionately delivered to those in the later stages of their life-cycle, since it required years in repayment that directly correlated with older ages and higher earnings.

Borrowers' and lenders' economic behavior

Moving onto the second branch of the literature review, researchers analyzed the effect the pause in repayments had on labor supply as well as the financial cost to the government. Briones and Turner (2025) studied the pauses in student loans from 2020, extending up to the Biden administration's formal broad-based cancellation plan (7). Briones and Turner (2025) estimated that the payment pause reduced weekly hours worked by an average of 1.34 hours (−4%) over the first 10-month period (7). There was a clear difference between these groups, with borrowers without a bachelor's degree witnessing a higher decline, whereas labor supply outcomes for borrowers with BA and graduate degrees were largely unaffected by this policy. According to the paper, liquidity from the payment pause would only be expected to have an impact on labor market outcomes of those borrowers facing credit constraints, which inhibit consumption smoothing. For these borrowers, the effect of increased liquidity would be expected to be negatively related to work hours, since leisure is a normal good. Finally, the last key takeaway given by the paper relating to the 2020 payment relief

is the uncertainty surrounding borrowers. Borrowers may have been uncertain regarding how long this pause was going to last, and therefore did not wish to change their hours work substantially, in fear of the payments resuming promptly.

The swelling student debt portfolio had profound impacts on the federal budget of the U.S. Ruddy *et al.* (2021) claim that this is caused due to falling repayment rates, increased access to loans (through direct issuing from the U.S. treasury), lack of state support for higher education, as well as rising living costs (10). The fiscal impact of these factors is measured in annual cost re-estimates of the loan portfolio.

Additionally, the lack of state funding has forced public and private universities to drive up their tuition fees. The reason for the lack of support may be due to tax cuts or competing priorities, forcing the state to conduct budget cuts. Ruddy *et al.* (2021) also argue that the transition to the Direct Loan program ensures that the supply of credit used to originate student loans is not at risk of drying up during recessions (10). They claim that the increased strain on the federal budget is evidenced by the upward cost re-estimates. Re-estimates in this decade have consistently trended upward, with the years 2020 and 2021 having increased the cost of these loans by \$116 billion (10). Thus, the rise in the student loan debt portfolio has and could have serious implications

for the federal budget, and has already begun to affect certain ways in which it issues loans.

METHODS AND MATERIALS

This section contains the analysis of the paper and quantifies the effects of the student loan value and loan forgiveness schemes introduced by the government on consumer spending.

Variables

This paper utilizes state-level data from the 50 U.S. states comprising the years 2003-2024 in order to examine the effect of student loans and student loan forgiveness on consumer spending. There regression includes 1071 observations. All variables listed in Table 1 have data in all states, across all years. The dataset contained no missing observations for any of the variables included in the regression analysis. Control variables were all selected due to a basis in literature: disposable income was included because consumption is strongly dependent on available income and liquidity (Ganong & Noel, 2019) (11); unemployment rate was included to capture labour-market uncertainty – greater income uncertainty may induce precautionary saving and reduce current consumption, consistent with the buffer-stock saving framework developed (Carroll, 1997)

Table 1. Definitions, units of measurement, and data sources for variables used in the fixed-effects panel regression models estimating the association of student loan debt and national student loan relief policies with state-level consumer spending in the United States, 2003–2024. Consumer spending is the dependent variable; student loan debt and the national policy indicator are the primary independent variables; and disposable income, lagged disposable income, unemployment rate, and HPI growth are included as control variables.

Variable	Descriptions	Source
Consumer spending	Nominal total consumer spending by state in millions of dollars.	U.S. Bureau of Economic Analysis: Consumer Spending (14)
Student loan value	This measures the numerical value of student loans by state in millions of dollars.	Federal Reserve Bank of New York (15)
National policy	Dummy variable to indicate whether there was loan forgiveness at a national level.	Dinerstein <i>et al</i> (2025) (6)
Unemployment rate	The rate of unemployment per state, measured as a percentage of the labour force, expected to affect consumer spending negatively.	U.S. Bureau of Labor Statistics (16)
Disposable Income	This measures the overall state totals of disposable income in millions of dollars.	U.S. Bureau of Economic Analysis (17)
HPI growth	The annual percentage change in the House Price Index (HPI) for each state.	U.S. Federal Housing (18)

(12); HPI growth was included to account for housing wealth effects, as changes in housing wealth have been shown to significantly influence household consumption (Case, Quigley & Shiller, 2005) (13). They conclude that changes in housing wealth exert a larger influence on spending, compared with stock market wealth, which they find to have a weak effect. Thus, changes in housing prices could potentially affect consumer spending and therefore must be controlled for when estimating the effect of student loan debt.

Model

This paper uses a panel regression model with fixed effects, with the states serving as the panel identifier and years serving as the time index. The model covers the fifty states in the U.S. (including DC), for the years 2003-2024 (6, 14-18). The equation is meant to analyze how student loan and loan forgiveness, along with other control variables such as disposable income, unemployment rate, HPI growth affect consumer spending, as seen in Equation 1.

By using fixed effects, the model controls for unobserved, time-invariant heterogeneity across the states, thereby isolating within-state variation over time. Finally, the model uses clustered standard errors to make estimates more reliable.

Time fixed effects were considered but were not included in the final specification because the national policy variable varies primarily over time rather than across states, and the inclusion of time fixed effects would result in collinearity with the policy variable.

Three model specifications were estimated. Model 1 includes student loan debt and the control variables. Model 2 adds the national policy dummy variable to estimate the average effect of loan relief policies on consumer spending. Model 3 introduces an interaction term between student loan debt and the national policy variable to examine whether the relationship between debt and consumption changes during periods of loan relief.

$$\text{Equation 1: } \text{Consumer Spending}_{i,t} = \beta_0 + \beta_1 \text{Student loan}_{i,t} + \beta_2 \text{National Policy}_{i,t} + \beta_3 \text{Unemployment rate}_{i,t} + \beta_4 \text{Disposable income}_{i,t} + \beta_5 \text{Disposable income}_{i,t-1} + \beta_6 \text{HPI growth}_{i,t} + \beta_7 (\text{Student loan} * \text{National Policy})_{i,t} + \varepsilon_{i,t}$$

where:

- β_0 denotes the constant term, while β denotes the coefficient of the control variables

- $\varepsilon_{i,t}$ denotes the error term
- $(\text{Student loan} * \text{National Policy})$ represents the interaction between student loan value and the national policy dummy. It is constructed by multiplying aggregate student loan value (in millions of dollars) by the policy indicator (1 during student-loan relief periods, 0 otherwise).

There were alternative model specifications that were used as robustness checks. These included a model without both the interaction term or the national policy dummy variable, a model that included the national policy but not the interaction term, and a model that included both the national policy and the interaction term. Across all three models' specifications, the results were generally similar (the student loan coefficient ranged from -2.246 to -2.671 across the three specifications of the model). The coefficient on student loan debt remained negative and statistically significant, with extremely similar magnitudes.

RESULTS AND DISCUSSION

Baseline Fixed Effects Results

The coefficient on student loans is -2.246 and is statistically significant. This implies that increases in aggregate student loan debt are associated with substantial reductions in consumer spending at the state level. Specifically, since both consumer spending and student loan balances are measured in millions of dollars, the coefficient in the regression can be treated as a 1-to-1 magnitude. The coefficient suggests that a \$1 decrease in aggregate student loan debt is associated with an estimated \$2.25 increase in aggregate consumer spending, holding other factors constant. This suggests that higher debt burdens constrain consumption, consistent with liquidity constraint theory. This is because higher debt often creates a "debt overhang" that creates a need for household deleveraging that depresses consumer spending (19).

Although the magnitude appears large, it should be interpreted as an aggregate state-level relationship rather than a household-level marginal effect. Changes in student debt may influence consumption through multiple channels, including repayment obligations, credit access, precautionary saving, and expectations regarding future financial conditions. As a result, the coefficient that is estimated includes not simply the direct cost of debt-servicing but also the debt-overhang effects on household consumption. This interpretation is consistent with Di Maggio *et al.* (2020), who find

Table 2. Fixed-effects panel regression results for the association of student loan debt and national student loan relief policies with state-level consumer spending in the United States, 2003–2024. Model 1 presents the baseline specification. Model 2 adds the national policy indicator, and Model 3 adds an interaction term between student loan debt and the policy indicator. Consumer spending, student loan debt, and disposable income are measured in millions of U.S. dollars; unemployment rate and HPI growth are measured as percentages. Coefficients represent the estimated change in state-level consumer spending associated with a one-unit change in each explanatory variable, holding the other included variables constant. State-clustered standard errors are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, and * $p < 0.10$.

Variable	Model 1	Model 2	Model 3
Student loan	-2.246*** (0.552)	-2.620 *** (0.628)	-2.670 *** (0.356)
Disposable income	0.386*** (0.091)	0.382*** (0.090)	0.382*** (0.032)
Lagged disposable income (by 1 year)	0.534*** (0.101)	0.534*** (0.099)	0.534*** (0.035)
Unemployment rate	-3241.890*** (769.493)	-3134.770*** (736.768)	-3121.720*** (289.386)
HPI growth	-297.426** (134.956)	-382.368** (162.293)	-377.039** (84.9329)
National Policy	N/A	5108.450** (2214.17)	N/A
Interaction term	N/A	N/A	0.908** (0.234)
Within R squared	0.984	0.984	0.984

that debt relief leads to significant increases in durable consumption and improvements in borrowers' financial outcomes (20).

Furthermore, the magnitude of the coefficient can also be interpreted through the lens of the Keynesian expenditure multiplier. Though the regression does not estimate the multiplier directly, the implied marginal propensity to consume (MPC) provides a useful benchmark for assessing whether the estimated magnitude is economically plausible. Using the standard relationship:

$$\text{Multiplier} = \frac{1}{1 - \text{MPC}}$$

This means:

$$2.246 = \frac{1}{1 - \text{MPC}}$$

This gives: $\text{MPC} \approx 0.555$ (or roughly 0.56).

Although the regression is estimated using aggregate state-level data, rather than specific household level observations, the implied MPC of 0.56 falls within the range of empirical studies on U.S. households. Specifically, Parker *et al.* (2013) found that households spend between 50% to 90% of their 2008 Economic Stimulus payments that were disbursed over the subsequent six months (21). This shows that there were significant consumption responses to temporary

increases in liquidity.

Additionally, Gross, Notowidigdo and Wang (2020) estimate an MPC of approximately 0.37 for U.S. households and find substantially larger consumption responses during periods of financial distress (22). Though the implied MPC of 0.56 may be higher than the MPC of 0.37 estimated by Gross, Notowidigdo and Wang (2020), their study finds that MPCs increase by approximately 20–30% during the Great Recession, which they attribute to tighter liquidity constraints (22). This is relevant particularly in the context of student loan debt, borrowers need to devote a portion of their income toward loan repayment, and hence may have tighter liquidity constraints. Hence, while the coefficient may appear large at first glance, the implied MPC value of 0.56 remains within a plausible range for liquidity constrained households and is consistent with prior literature examining consumption responses to any form of liquidity shock. The within R^2 is 0.9842, indicating that the model explains a very high proportion of within-state variation over time.

Among the control variables, disposable income is highly significant, and the coefficient is positive, indicating that increases in income directly raise consumer spending. This is consistent with Ganong & Noel (2019), who show that household consumption is highly sensitive to changes in available income (11). The lagged disposable income is largely positive and significant. This indicates a strong persistence in

consumption behavior. This means that households rely on past income patterns, rather than immediately switching their consumption habits if their income changes. Unemployment rate is also highly significant but has a large negative coefficient, indicating that it significantly reduces consumer spending. This could be attributed to income loss during periods of unemployment. This could reduce the incentive for consumers to spend (due to the lack of disposable income), and result in precautionary saving during periods of labor market uncertainty. As a result, the unemployment rate has a compounding adverse effect on consumer spending.

The relationship between house prices and consumption depends on specific stakeholders in the economy. While Case, Quigley & Shiller (2005) find that increases in housing wealth generally exert a positive effect on consumption, the aggregate effect may vary across groups within the population (13). Although, homeowners may see a positive wealth effect, the opposite can occur for first time buyers and renters. Since the analysis is done at the state level, it is not possible to differentiate between individual's house ownership status. Hence, this explains why the variable is only weakly significant. One possible explanation for the negative coefficient is that renters and first-time buyers are more sensitive to changes in prices compared to homeowners. As such, rising house prices slightly crowd out disposable liquidity.

Loan Forgiveness Policy Effects

For the second model which utilizes national policy as a dummy variable, the student loan coefficient is -2.623^* , confirming the negative relationship with consumer spending. The national policy coefficient is positive and has a magnitude of 5108.45. This means that the introduction of the policy has a significant positive effect on consumer spending and that the government's intervention allows for a liquidity increase which prompts consumers to spend more. This corresponds to roughly an increase in consumer spending of roughly \$5.1 billion per state during the period in which this policy is in effect.

This is consistent with Ganong & Noel (2019), who show that household consumption is extremely sensitive to available income, with spending falling dramatically due to reductions in disposable income (11). This supports the idea that increases in liquidity – caused by student loan relief – can also lead to higher consumer spending. This finding is also consistent with Di Maggio *et al.* (2020), who document that following debt relief, there

are increases in household consumption (20). Therefore, this reinforces the conclusion that national policies which reduce repayment burdens can stimulate spending.

Interaction Effects and Policy Moderation

The control variables behave consistently across models: disposable income remains positive and significant, while unemployment negatively affects spending. For the third model, even when the interaction term is used, the student loan coefficient has become larger with a magnitude of -2.67089 . It still has a negative sign, corroborating the fact that it has a negative effect on consumption.

The interaction term has a positive coefficient and a magnitude of 0.907, and is statistically significant. This means that during periods of student loan relief or pauses, the negative effect of student loans is offset, allowing for increases in consumer spending. Specifically, the negative coefficient of the student loan variable drops from -2.67 to -1.77 . This reduction is caused by the fact that student loan forgiveness essentially reduces the financial burden of the debt by cancelling it or temporarily pausing it, hence, reducing the immediate pressure to pay back the loans. As a result, although the actual student loan balance is kept constant, the debt has a diminished effect on individuals, leading to a smaller negative impact on spending (as it is offset by the interaction term). This result is consistent with Gross, Notowidigdo and Wang (2020), who show that consumption responses become larger when households face binding liquidity constraints (22). Student loan relief may reduce liquidity constraints by reducing repayment pressure and weaken the negative effect of debt on consumption. Finally, the control variables remain consistent: disposable income is strongly positive (0.382), while unemployment remains significantly negative.

CONCLUSION

This paper set out to examine how student loan debt influences household behavior, with a special focus on whether debt burdens impose liquidity constraints, and whether policy interventions in the form of loan forgiveness can actually mitigate these effects. The paper drew on literature that focused on the designs of loan pause and forgiveness policies as well as the behavioral responses of borrowers and households. As a result, the paper set out to empirically test how households adjusted their consumption based on loan policies and increasing debt, and what effect it had on disposable household

liquidity.

The regression results provide strong evidence that student loan debt significantly constrains household consumption. In the baseline model, a one-dollar increase in student loan debt is associated with a significant decrease in consumer spending, assuming other factors to be constant. This large effect supports the idea of debt overhang, where consumers prioritize repayment or precautionary saving, rather than consumption.

Furthermore, the analysis demonstrated that policy interventions strongly influence household behavior. The paper concludes that the introduction of the national loan relief policy is associated with an average increase in consumer spending of approximately \$5.108 billion per state during policy periods. This indicated that even temporary increases in available liquidity to borrow made it significantly more likely for them to consume more. This effect is discussed in depth in Dinerstein *et al.* (2025) regarding the Biden administration's broad-based loan forgiveness policy (6). The analysis also indicates that policies do not solely increase consumer spending, but that they also mitigate the negative impact of existing student loan debt (6). This is shown through the negative coefficient of the student loan variable which falls substantially. This is crucial, as it reveals that consumer spending can also be dictated by future expectations, and not just the current liquidity on hand. Thus, by reducing immediate repayment pressure, policy intervention will reduce liquidity constraints and permit households to reallocate towards consumption and greater financial stability. This is supported in Di Maggio *et al.* (2020), who find that debt relief leads to significant increases in durable consumption and improved financial stability among borrowers (20).

These findings carry important implications for stakeholders. For policymakers, while student loan forgiveness can stimulate consumption, the design of these policies is critical. Dinerstein *et al.* (2025) highlight that broad-based forgiveness, particularly based on repayment history or eligibility, leads to regressive outcomes for borrowers (6). Next, the broader fiscal and macroeconomic risks cannot be understated. Ruddy *et al.* (2021) show that rising loan balances, declining repayment rates, and the increasing reliance on income-driven repayment plans have significantly increased the fiscal burden on the government, with cost re-estimates trending upward by over \$100 billion in recent years (10). Finally, for borrowers themselves, the results reinforce the fact that student loan debt remains a consistent factor in a household's decision-making, even past the

repayment period. Additionally, given how student loan balances exist well into the ages of 60+, raises concerns regarding the long-term sustainability of the current student loan system.

This study has several limitations. While the paper studies the effects on individual households, the regression analysis uses aggregate proxies to determine behavior for households. For example, different states and individuals may have unique marginal propensities to consume. Thus, the MPC derived may not be representative of all states. Similarly, effects of house prices on consumption spending would also depend on the share of homeowners versus renters. Future researchers could compile individual data, including variables that could control for individual spending patterns. This could include house ownership status or number of financial dependents. Additionally, because the model does not include time fixed effects, the estimated policy effects could potentially capture broader national trends occurring during that time period or national shocks. Though the framework captures state-to-state variation effectively, it does not account for all potential channels through which debt is affected. Future researchers could also account for spillover effects across countries, especially in relation to international students.

In conclusion, this paper provides robust evidence that student loan debt acts as a significant constraint on household consumption. The paper stresses not only the importance of loan forgiveness policies, but the importance of the implementation of these policies – the targeting and design, so that they can actually alleviate the colossal debt the U.S. faces.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest related to this work.

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