Relief Beliefs: Effects of Anticipated Student Loan Forgiveness

Danial Salman and Xuan Xie

University of Washington – Foster School of Business



Motivation

Growing political support for student loan forgiveness

- Empirical evidence on the effects of such policies is lacking
- Laboratory for studying \triangle expectations \rightarrow behavior
- Meaningful, yet uncertain, wealth shock
- Rational consumers immediately incorporate news about permanent income changes?
- What is the role of presidential announcements in shaping households' expectations?

This Paper

• What are the effects of student loan forgiveness on household consumption?

- Following the announcement, retail stores located in counties with a 1 percentage point higher share of eligible borrowers saw a persistent .1-.2% increase in weekly sales
- Average quarterly MPC is approximately 4.5%
- No spending response in counties with high shares of financially delinquent households
- Results are consistent with a beliefs channel

Student Loan Forgiveness Plan

	Aug 2022:	Oct		Oct		
	Biden's	2022:		2023:		
	Debt	Арр		Repay-		
	Relief	Website		ment		
	Plan 	Launches 		Resumes		
Mar	Sep		Jun			
2020:	2022:		2023:			
Start of	First		Supreme			
Debt	Legal		Court			
Mora-	Chal-		Blocks			
torium	lenge		Plan			

 President Biden's 2022 loan forgiveness announcement promised debt relief of \$10,000 to \$20,000 for approx. 42 million borrowers

Data

Department of Education (FOIA):

- # of eligible borrowers at the zip code level
- # of debt relief applications at the zip code level
- High cross-sectional variation
- Weekly store-level spending data for over 50,000 U.S. retail stores
- Sales exceed \$500 billion in 2022; stores geolocated by county

Credit Bureau:

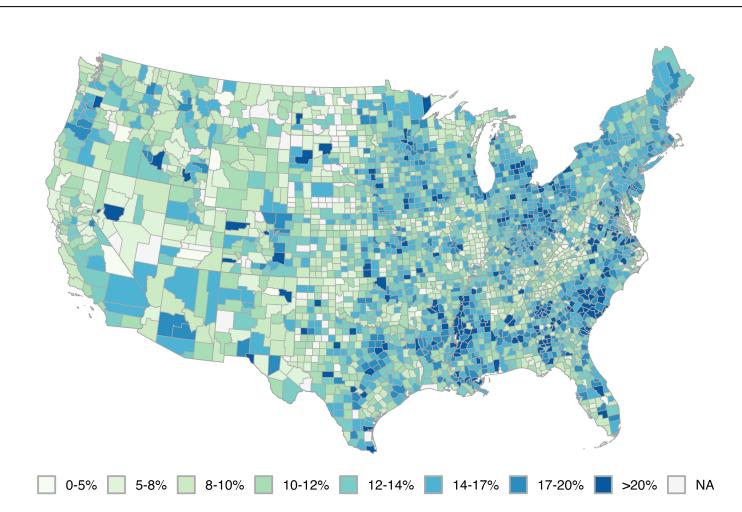
Retail Scanner: ^a

- Representative county-level data from a major credit bureau
- 15% of people have student debt; median balance \$20,108; median payment: \$160

Demographics:

- Sourced from ACS, IPEDS, MIT Election Lab, and FEC
- Includes population, income, college enrollment, political affiliation, etc.

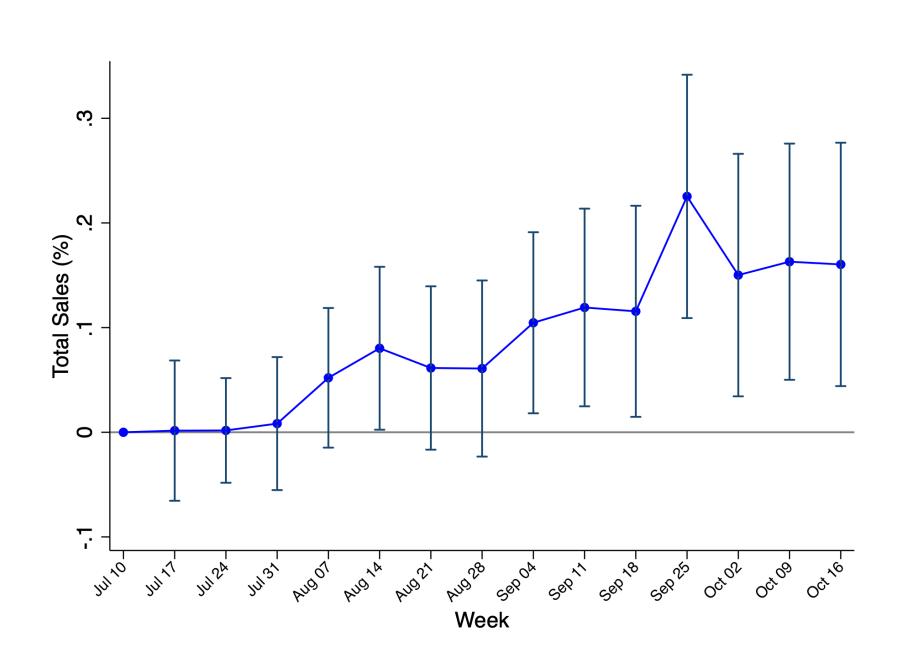
Distribution of Eligible Student Loan Borrowers



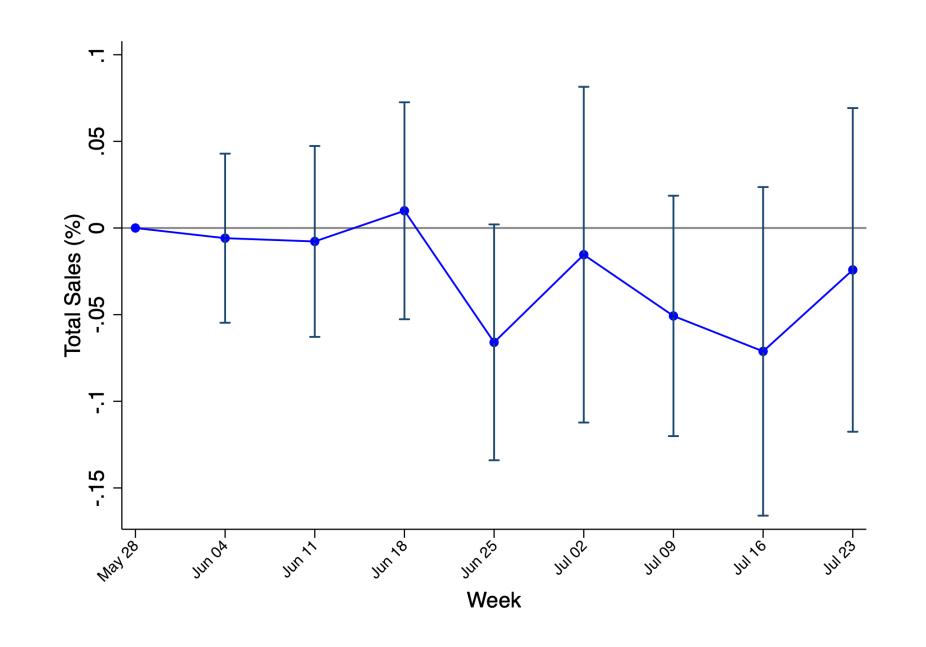
Dynamics of Spending Response

$$Y_{ikt} = \mu_i + \sum_{t=-6}^{8} \beta_t \text{ (Eligible Share}_k \times \text{week}_t) + \sum_{t=-6}^{8} \delta_t' \left(X_i \times \text{week}_t \right) + \varepsilon_{ikt}$$

- Y_{ikt} is ln(Sales) in store i in county k in week t
- ullet Eligible Share $_k$ is the share of adults in county k who were eligible for forgiveness under the plan



Supreme Court Reversal



Increased Spending at Retail Stores Post-Announcement

$$Y_{ikt} = \beta_{DiD}$$
Eligible Share $_k \times Post_t + \mu_i + \tau_t + \epsilon_{ikt}$

	(1)	(2)	(3)	(4)
Eligible Share x Post	0.24*** (0.034)	0.22*** (0.045)	0.23*** (0.044)	0.10*** (0.038)
Store FE Week FE	YES YES	YES NO	YES NO	YES NO
Market-Week FE	NO	YES	YES	YES
Parent-Week FE Channel-Week FE	NO NO	NO NO	YES YES	YES YES
Demographics-Week FE Adj. R-squared	NO 0.99	NO 0.99	NO 0.99	YES 0.99
Observations	798240	798030	798015	798015

Standard errors in parentheses

Weaker Effects where Delinquencies are High

 $Y_{ikt} = \beta_{DDD}$ Eligible Share $_k \times Post_t \times High Delinquency_k$

 $+ \beta_2$ High Delinquency_k $\times Post_t$

 $+ \beta_3$ Eligible Share $_k \times Post_t + \mu_i + \tau_t + \epsilon_{ikt}$

	(1)	(2)	(3)
Eligible Share x Post	0.17*** (0.050)	0.075 (0.046)	0.32*** (0.085
High SL Debt x Post	0.022* (0.013)		
Eligible Share x High SL Debt x Post	-0.12* (0.068)		
High SL Payment x Post		-0.021 (0.016)	
Eligible Share x High SL Payment x Post		0.100 (0.087)	
High Delinquency x Post			0.057**
Eligible Share x High Delinquency x Post			-0.33** (0.088)
Store FE	YES	YES	YES
Week FE	NO	NO	NO
Market-Week FE	YES	YES	YES
Parent-Week FE	YES	YES	YES
Channel-Week FE	YES	YES	YES
Demographics-Week FE	YES	YES	YES
Adj. R-squared	0.99	0.99	0.99
Observations	781447	770410	797893

Standard errors in parentheses

Conclusion

- Consumer spending is responsive to political news
- Government debt relief interventions can have stimulatory effects
- Results highlight the role of public communication in shaping expectations

^aDisclaimer: Researchers' own analyses calculated (or derived) based in part on data from Nielsen Consumer LLC and marketing databases provided through the NielsenIQ Datasets at the Kilts Center for Marketing Data Center at The University of Chicago Booth School of Business. The conclusions drawn from the NielsenIQ data are those of the researchers and do not reflect the views of NielsenIQ. NielsenIQ is not responsible for, had no role in, and was not involved in analyzing and preparing the results reported herein.

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

^{*} p < 0.10, ** p < 0.05, *** p < 0.01