

Income, Liquidity, and the Consumption Response to the 2020 Economic Stimulus Payments

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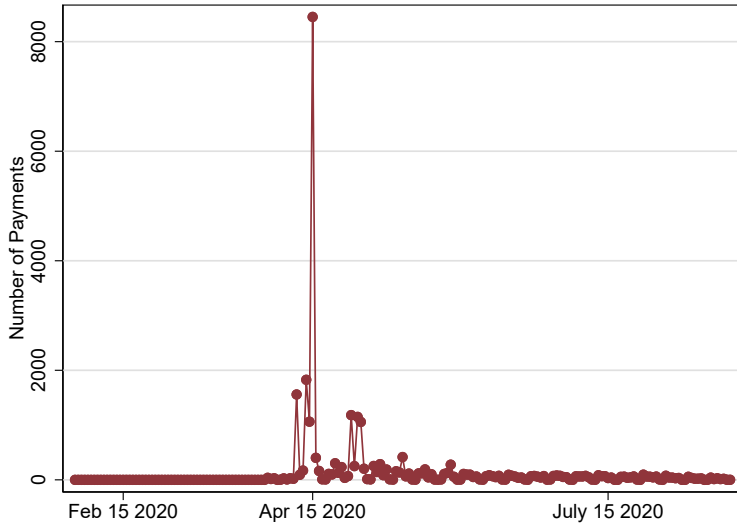
Workshop on Household Finance and Housing
June 2021

- The COVID-19 outbreak has upended economies around the world
 - COVID-19 triggered huge new fiscal transfers from governments to households
 - At the same time, a very different economic and policy environment than past recessions

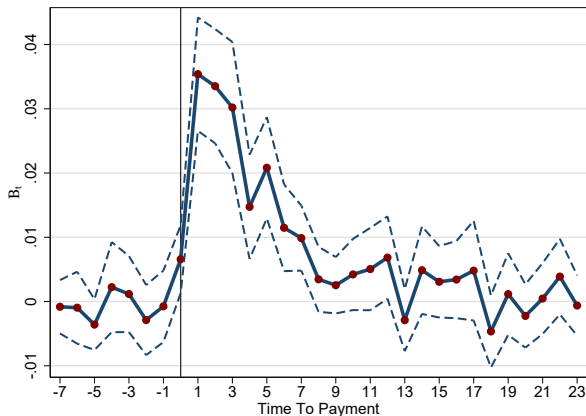
Motivation

- The COVID-19 outbreak has upended economies around the world
 - COVID-19 triggered huge new fiscal transfers from governments to households
 - At the same time, a very different economic and policy environment than past recessions
- We use transaction level financial data from a FinTech App to measure impacts of first stimulus payments in the US
 - Aggregate reactions?
 - Heterogeneity? Scope for better targeting?

Timing of Identified Stimulus Payments

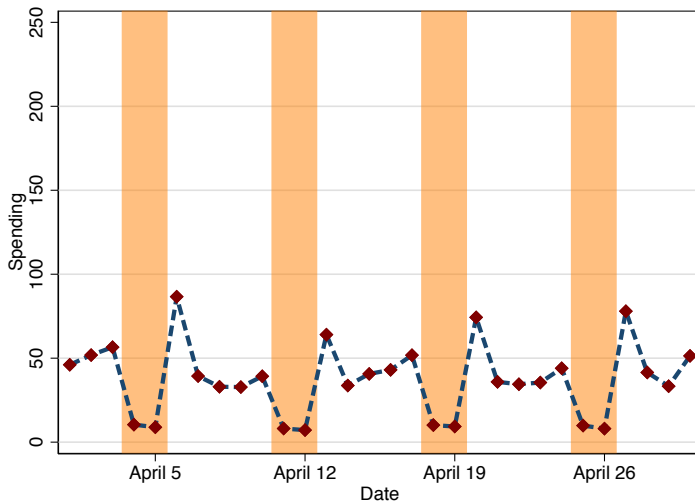


Daily 'Excess' Spending Following Stimulus



- Estimates are scaled by the stimulus amount
- All estimates weighted on demographics and beginning-of-year financial indicators

Raw Spending Around Stimulus - Non-Recipients

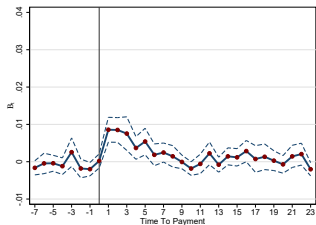


Mapping Out MPC Across Horizons

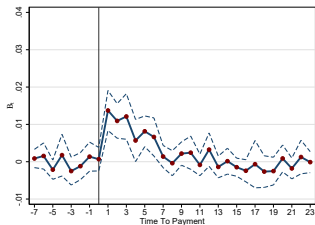
	(1)	(2)	(3)	(4)	(5)
	Total	Total	Total	Total	Total
1-Week MPC	0.140*** (0.0124)				
2-Week MPC		0.190*** (0.0171)			
1-Month MPC			0.219*** (0.0254)		
2-Month MPC				0.286*** (0.0490)	
3-Month MPC					0.265*** (0.0757)
Date FE	X	X	X	X	X
Individual FE	X	X	X	X	X
Observations	523208	523208	523208	523208	523208
R^2	0.200	0.200	0.199	0.199	0.199

Daily Spending Responses by Category

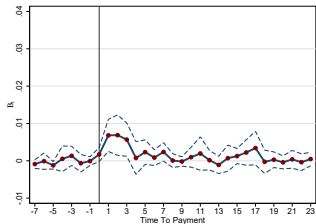
Household



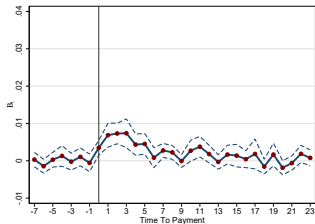
Non-Durables



Durables

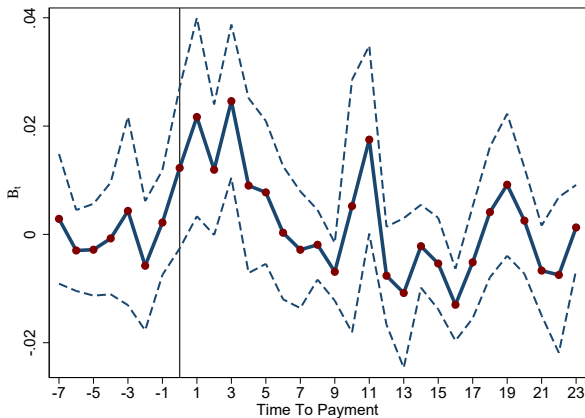


Food

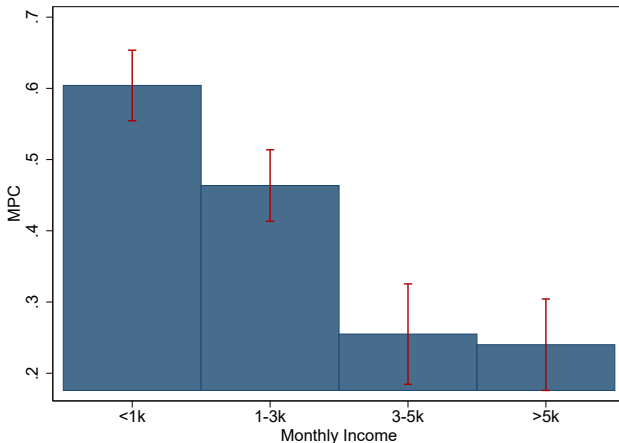


'Payments' Exhibit Large and Immediate Response

- Includes loan payments, rent, mortgage, credit card payments
- Positive effect is more persistent, especially near beginning of a month

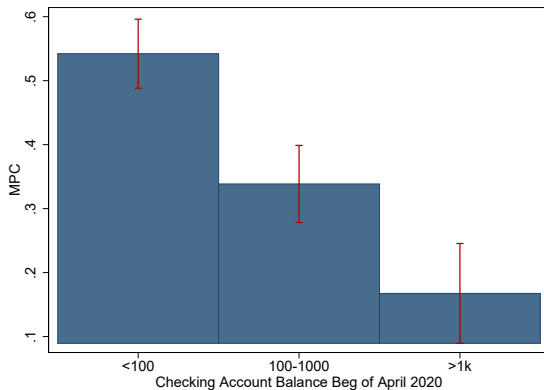


Substantial Variation Across Income Groups



- MPC for low income nearly twice that for high income group

Minimal Effect for High Liquidity Recipients



- Liquidity more important than income when tested jointly
- ‘High Income & Low Balance’ group tends to act like ‘Low Balance’, not ‘High Income’

Beliefs (from survey) Matter Significantly for Spending

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Total Spending											
Post-Stimulus X Stimulus	0.246*** (0.0704)	0.242*** (0.0709)	0.238*** (0.0396)	0.229*** (0.0410)	0.186*** (0.0486)	0.178*** (0.0485)	0.147*** (0.0551)	0.142** (0.0557)	0.252*** (0.0590)	0.243*** (0.0593)	0.227*** (0.0479)	0.219*** (0.0475)
Post-Stimulus X Stimulus X Stock	-0.333*** (0.114)	-0.335*** (0.115)										
Post-Stimulus X Stimulus X Unemployed			-0.281*** (0.0696)	-0.276*** (0.0725)								
Post-Stimulus X Stimulus X Salary Cut					-0.231** (0.0957)	-0.229** (0.0974)						
Post-Stimulus X Stimulus X Higher Taxes							-0.127 (0.0946)	-0.130 (0.0965)				
Post-Stimulus X Stimulus X Benefit Cuts									-0.255*** (0.0756)	-0.249*** (0.0772)		
Post-Stimulus X Stimulus X Pessimistic											-0.202*** (0.0759)	-0.200*** (0.0767)
Date FE	X	X	X	X	X	X	X	X	X	X	X	X
Individual FE	X	X	X	X	X	X	X	X	X	X	X	X
Individual X Day of Week FE		X		X		X		X		X		X
Observations	100064	100064	100064	100064	100064	100064	100064	100064	100064	100064	100064	100064
R ²	0.314	0.381	0.315	0.381	0.314	0.381	0.314	0.381	0.314	0.381	0.314	0.381

- More pessimistic users tended to save more of stimulus checks

Concluding Remarks

- What are households doing with their stimulus checks?
 - Substantial spending in short-term but died out quickly
 - Overall savings out of stimulus check were high
- Income and especially liquidity play important roles in MPC out of stimulus payments
 - Role for more targeting in stimulus payments
- Effectiveness of stimulus can be in part governed by economic beliefs at the time