DISCUSSION OF
HOW DO PAYDAY LOANS AFFECT CONSUMERS?
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BIG PICTURE

- In 2005 - 2007: a first generation set of working papers about payday lending asked whether payday lending is welfare improving.
  - Morgan Strain (2008), Morse (2011), Skiba Tobacman (2015), Meltzer (2011), Zinman (2010)
  - Answer: Mixed
  - Later papers fail to find much negative impact on financial well-being relative to a control (e.g., Bhutta (2014), Bhutta, Skiba, Tobacman (2015))
  - Why?
    1. Issue is heterogeneity in using payday loans for bridge loan vs habit
    2. Control groups are in dire straits too. How do people cope?
  - Point: we should, in my opinion,:

a. Move from the yes/no question to figuring out how to make the product evolve to endogenously sort individuals across the heterogeneities of need and use of payday loans

b. Figure out how people cope.

THE YES/NO QUESTION APPLICABILITY

Example of yes/no relevance: Ban in U.S. for payday loans for military:

- Carrell Zinman (2014): welfare destroying in Air Force data
- But recently Carter Skimmyhorn (2016), Zaki (2016) more micro data from Army fail to find harm.

But neither the UK nor U.S. (federal) governments are currently entertaining the yes/no question.

Why?... this product is distasteful in many ways, but clearly there is demand for SOME kind of distress finance for people and people say that in surveys

- Up to 10% of UK population
- ~3% of U.S. population

REGULATION ENVIRONMENT

A couple of slides on UK and US regulation

Because this helps motivate what we need to learn

And, what we really can say, that is super important, from this paper

FCA : UK REGULATIONS AS OF 2015

Regulation Approach: Interest Rate Cap Modelled after Australians

- Cap loan interest rates at 0.8% per day, with total cost cap of 100% of loan.
- eg: take out a £200 loan for 14 days: pay £22, which is APR of 287%
- Cap binds the number of cycles

FCA : UK REGULATIONS AS OF 2015

FCA website: “We now estimate 7% of current borrowers may not have access to payday loans - some 70,000 people. These are people who are likely to have been in a worse situation if they had been granted a loan. So the price cap protects them.”

How do we know this “protects them” welfare statement

- Depends critically on whether filtering out chronic users vs those facing a shock
- But, if so, shouldn’t the product space should evolve?
- And how are the turned-down borrowers coping?

CFPB: U.S. PROPOSED REGULATIONS (AS OF JUNE 2016)

Payday loan products part of regulation proposal

- Choice 1: Lender assesses ability-to-pay (income, debt, expense estimate)
  - This seems like an attractive idea, but it may be a sideshow:
    - Customers will not want product because credit check and reporting from a payday lender will likely negatively affect credit history
    - Lender will not want to lose customers to assessment and not want to pay credit agencies fees

- Choice 2: Payday loan up to $500
  - Must pay 1/3rd of principle back after each of 3 cycles. Paid off in 3.
  - No renewal for 30 days. Only 6 of these within 12 months.

- Choice 2 offers behavior adjustment product that also filters out those not liking the forcing of using the loan for ST distress. PRODUCT INNOVATION: A STEP TO MAKE THE PRODUCT MORE EFFECTIVE AND CHEAPER IF THE FILTER WORKS

NEXT GENERATION: USE THE LITERATURE ON PEOPLE'S USE OF BORROWING TO IMPROVE PRODUCT DESIGN

A very incomplete idea of some literature which could enable thinking about product design for pareto policy improvements across heterogeneity of borrowers

Studies of why people get into trouble

- Smoothing issues/making ends meet: Stephens (2003), Parsons van Wesep (2013), Leary Wang (2016)
- Preferences: Laibson (1997), Meier Sprenger (2010), Kuchler (2012)
- Neglect: Berman, Tran, Lynch, Zauberman (2015)
- Aging: Agrawal, Driscoll, Gabaix, Laibson (2009)
- Cognition/Focus: Morse Bertrand (2011), Stango Zinman (2011), etc.

Studies of marginal use of income (helicopter drop studies)

- Johnson, Parker Souleles (2006;2013 w McClelland); Agrawal, Liu, Souleles (`07); Bertrand Morse (`09)

Studies of consumer loan contract form

- E.g., 1980s literature from Stiglitz Weiss, Hertzberg, Lieberman, Paravisini (`15); Carter, Skiba, Sydnor (`13)

TURNING TO THE PAPER ITSELF

FUZZY DESIGN CONCERNS

Two pieces

1. Fuzziness of Credit Score Thresholds as a part of a proprietary scoring model
   - Seems that the design loads people with lower ability-to-pay in other dimensions in the application into the treated group

2. The Threshold Bandwidth
   - Seems that the bandwidth selects people in just above that are much higher credit score, more educated, slightly more income, more family households

Reconcile these: Is it that the design identifies those with larger other debt burden?

Payday Lender	Prob (Accept | Above Threshold)	
A	0.714	***
B	0.482	***
C	0.489	***
D	0.481	***
E	0.446	***
F	0.438	***
G	0.425	***
H	0.251	***
I	0.234	***
J	0.210	***
K	0.022	
L	0.014	
M	0.003	
N	0.001	
O	-0.030	
P	-0.010	
Q	-0.071	

The Fuzzy Design

The idea is that lenders each have their own scoring model something like:

- RiskScore = F(credit score threshold, ability to pay, (?) demographics, (?) income source, etc)
- If the credit score threshold were an absolute discontinuity, the Pr (accept | above) =1
- To the extent that those with above-threshold credit scores get denied, this means that applicant is worse on other observables like ability to pay
- But then the discontinuity IV, because not perfect, is giving weight to those with above threshold scores who would have been denied because of low ability to pay and vice versa for the rejects

QUICK SIMULATION TO MAKE POINT

Made 3 variables & then created thresholds at midpoints

- **creditscore =670* (1+random)**
- **ability_to_pay=random normal (0,1)**
- **noise=random uniform(0,1)**

Proprietary score = .4 * above credit score threshold + .4 * above ability_to_pay threshold + .2 * above noise threshold

Simulated 500 observations

Logit (accept) = above credit score threshold

Get (1st stage) Predicted probability of investing corresponding to authors

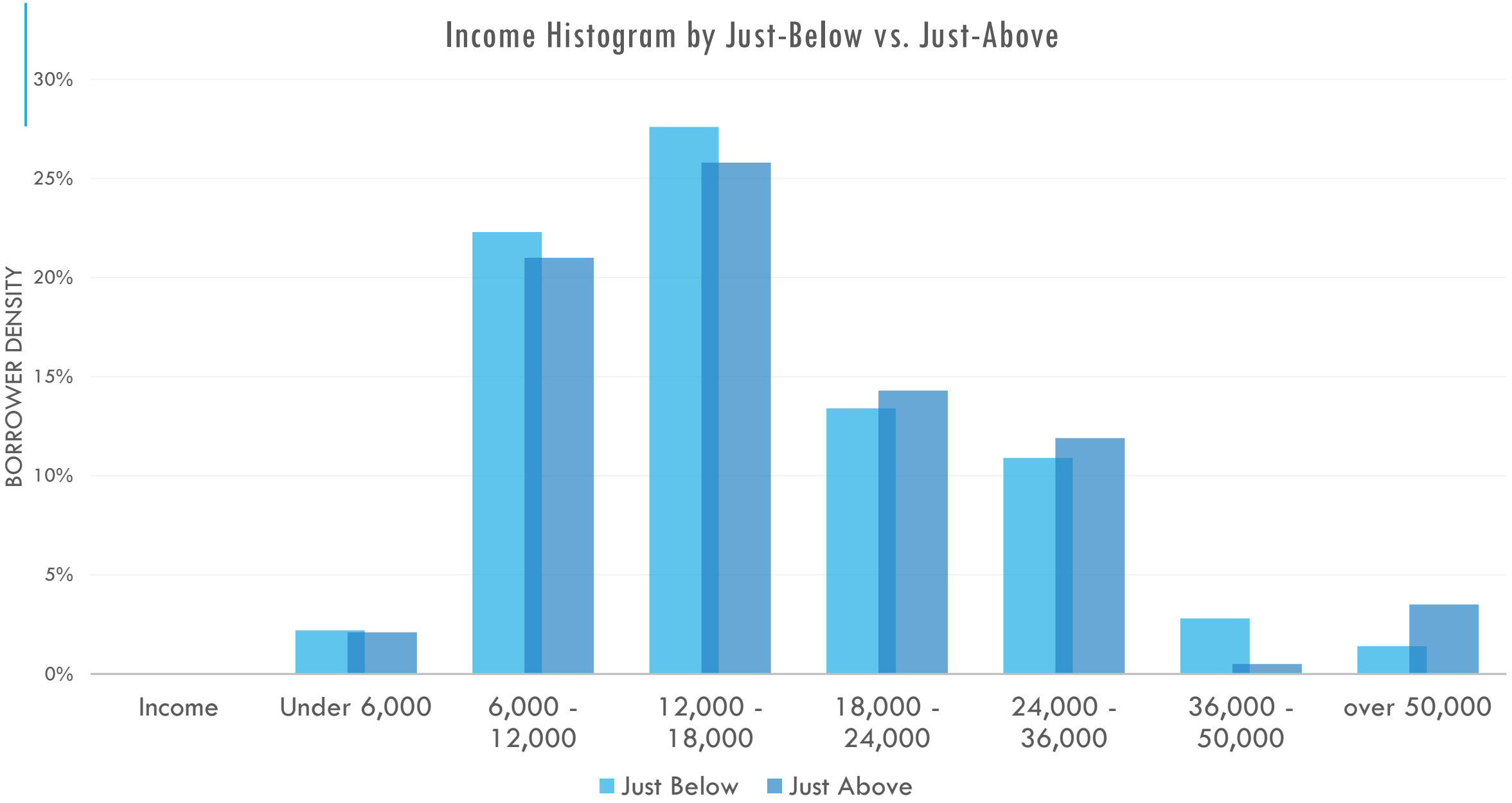
	Delta-method dy/dx	Std. Err.
abovethresh	.4062591	.019165

prob accept (1st stage)	mean(creditscore)	mean(ability_to_pay)
.2758621	653.4791	.1130821
.7615063	687.006	.064348

ON THE FLIP SIDE: THE BANDWIDTH

If the bandwidth around the threshold is too large, people on the above threshold will look quite different, especially on credit

SIMILAR INCOMES, PERHAPS A BIT HIGHER



WHAT ABOUT THESE CHARACTERISTICS?

	Just Below	Just Above	p-value
Look identical on: Age, Has Children, White, Unemployed			
Are these materially different as a package?			
Married/ with Partner	0.639	0.698	0.049
Home Owner with Mortgage	0.060	0.086	0.113
College Degree	0.153	0.215	0.021
What about this one?			
Credit score	658	680	0.008

REPEATING THIS SLIDE

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Reconcile these: Is it that the design identifies those with larger other debt burden?

How to fix these? Decrease bandwidth would help

RESULTS ROBUSTNESS & INTERPRETATION

	Reported Bandwidth	
	0-6 Months	6-12 months
Credit card apps		
Personal loan apps		
Revolving credit		
Log nonpayday balances		
Log credit card balances		
Log personal loan balances		
Log revolving credit balances		
Bad credit events non-payday		
Credit card bad credit event		
Personal loan bad credit event		
Overdraft		
Worsening credit		
Worsening house bills		
Log non-payday default balances		
% of balances in default		
Change in credit score		

Main Results

I chose a selection of variables, including all significant ones, that I thought might pick up a change (worsening) of financial condition. Focusing only on non-payday loan variables.

Reported Bandwidth		
	0-6 Months	6-12 months
Credit card apps	***	not/sig
Personal loan apps	***	***
Revolving credit	not/sig	not/sig
Log nonpayday balances	not/sig	not/sig
Log credit card balances	not/sig	not/sig
Log personal loan balances	not/sig	not/sig
Log revolving credit balances	not/sig	not/sig
Bad credit events non-payday	not/sig	***
Credit card bad credit event	not/sig	not/sig
Personal loan bad credit event	not/sig	***
Overdraft	*	**
Worsening credit	not/sig	***
Worsening house bills	not/sig	not/sig
Log non-payday default balances	not/sig	**
% of balances in default	- *	+**
Change in credit score		***

Clearly, differences exists …
+ personal loan applications, - credit scores, + overdraft, + bad credit events.

But given my concerns about the fuzzy threshold and the large dataset, I looked to finer bandwidth in appendix

	Reported Bandwidth		Finer Bandwidth	
	0-6 Months	6-12 months	0-6 Months	6-12 months
Credit card apps	***	not/sig	not/sig	--
Personal loan apps	***	***	***	*
Revolving credit	not/sig	not/sig	--	--
Log nonpayday balances	not/sig	not/sig	--	--
Log credit card balances	not/sig	not/sig	--	--
Log personal loan balances	not/sig	not/sig	--	--
Log revolving credit balances	not/sig	not/sig	--	--
Bad credit events non-payday	not/sig	***	--	not/sig
Credit card bad credit event	not/sig	not/sig	--	--
Personal loan bad credit event	not/sig	***	--	***
Overdraft	*	**	--	not/sig
Worsening credit	not/sig	***	--	not/sig
Worsening house bills	not/sig	not/sig	--	--
Log non-payday default balances	not/sig	**	--	not/sig
% of balances in default	- *	+**	--	not/sig
Change in credit score		***	--	***

INTERPRETATION OF RESULTS

One might argue that the paper thus identifies precisely no effect

- In line with financial condition results of Bhutta (2014), Bhutta, Skiba, Tobacman (2015)
- This is almost true.

No result EXCEPT Personal Loans, which debt consolidation loans offered in the UK mostly by the banks

What I learned is that for payday borrowers in the UK, consolidation loans are the mechanism of coping. THIS IS A HUGELY IMPORTANT RESULT

Back up…. The literature on coping.

Lusardi Tufano's Bookings paper finds that half of Americans can't cope.

What does that mean? Can't cope. They have to cope, they just don't know how.

If financial products were set up to help people cope, wouldn't that be better?

Payday borrowers BRIDGING to consolidation loans… isn't that an improvement?

How can we improve the mechanisms to get there?

CONSOLIDATION LOANS

Consolidation loans in the U.S. have a bad reputation

- Would like to know more about U.K. consolidation loans

Perhaps THE MOST IMPORTANT, MOST UNDERSTUDIED FINANCIAL PRODUCT in this space if it is the mechanism to get people out of high expense payday loans

Ending note: U.S. Congress thinks that FinTech (e.g., the platforms) are serving this role

Unlikely, or Not Yet

LENDING CLUB STATS FROM MORSE (2015, ANNUAL REVIEW OF F.E.)

Type of Loan	Annual Income	Loan Amount	Interest Rate	Term Months	Count	% of Sample	Payments
Car	65,993	8,556	0.134	39.2	185	0.8%	$267.29
Credit Card	74,017	15,406	0.134	39.8	5,680	25.0%	$475.58
Debt Consolidation	75,468	16,350	0.141	41.6	13,797	60.8%	$492.27
Home Improvement	87,893	15,056	0.129	41.8	1,120	4.9%	$444.33
House	82,617	16,912	0.139	41.7	138	0.6%	$506.25
Major Purchase	78,365	9,740	0.129	39.4	443	2.0%	$301.56
Medical	73,325	8,375	0.191	38.0	122	0.5%	$289.11
Moving	76,911	8,325	0.193	37.6	73	0.3%	$290.08
Other	68,913	9,702	0.197	40.0	696	3.1%	$324.56
Renewable Energy	99,977	12,602	0.194	42.5	11	0.0%	$401.91
Small Business	92,278	17,023	0.193	40.9	253	1.1%	$557.48
Vacation	63,913	6,003	0.190	36.9	55	0.2%	$211.76
Wedding	70,315	11,703	0.194	39.4	134	0.6%	$394.56
Total	75,674	15,542	0.141	41.0	22,707	100.0%	$473.86

Take Away : These loans are overwhelmingly consolidations for people with high debt. But these are also High Income, High Credit Score individuals. But, if a market were serving "coping" for the HIGH RISK we need to hear more about that product.