BEHAVIORAL CROSS-SELLING: EVIDENCE FROM RETAIL CREDIT CARDS

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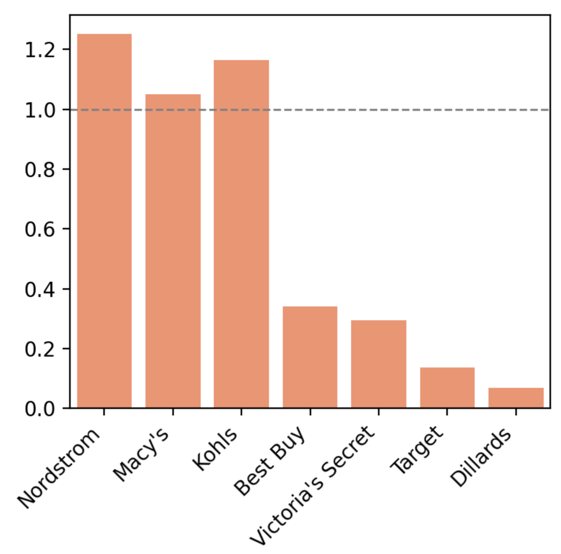
Introduction

- For several US retailers, direct revenue from credit cards ≫ operating income. *Why?*



- Propose theory of ***behavioral cross-selling:*** Non-financial firms can cross-sell products that capitalize on the behavioral biases of their consumers
- Test theory in **retail credit card** market

Theory

- Firms produce a base good and can also cross-sell a financial product
- Some customers exhibit behavioral biases (e.g., inattention)
- Non-financial firms have an *acquisitional advantage* in selling these financial products to customers with biases, aka. ***behavioral cross-selling***
- Firms w/ more behavioral consumers:
  ↑ likelihood of offering product +
  ↑ incentives to uptake (e.g. discounts)

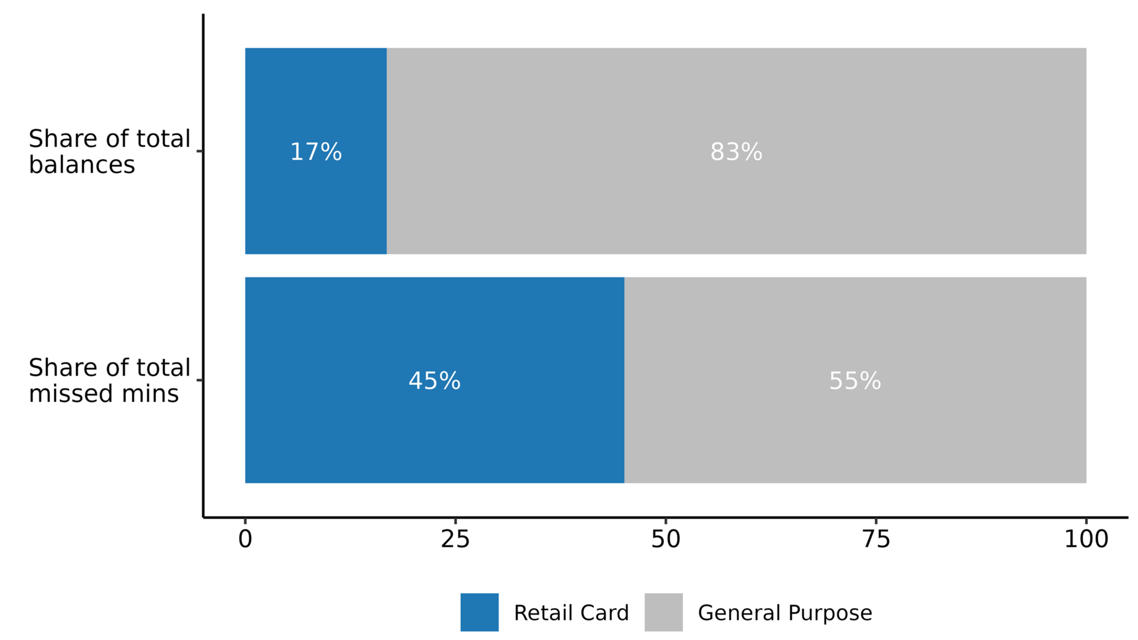
Retail Credit Cards Setting

- Retail cards can only be used at a small set of stores (e.g., Macy's card)
- **1/3** of US adults w/ a credit record have at least one retail card
- Tend to be lower balance and credit score, but similar delinquency rates

Main Results

Retail credit cards generate a lot of late fees!

- Retail cards are **17%** of credit card balances but **45%** of missed minimums, triggering late fees
- *Within borrower & month,* borrowers are 17% more likely to miss a min. on a retail card



- Ex: we estimate clothing cards generate $65 of late fees per $1000 spent, **over 4x that of general-purpose credit cards**

Almost half of these missed minimums are avoidable

- Among the highest credit score borrowers, **70%** of missed minimums on retail cards were avoidable based on payments made on other cards
- On average, avoidable missed mins imply a **25pp** increase in APRs and **$3.3 billion** increase in aggregate revenue annually
- Why miss a makeable minimum?
  - Evidence of relevant mechanism: **forgetting**
  - Less frequently used cards are more likely to incur missed minimums

Firms respond strategically to behavioral customers

- **Extensive Margin:** 1 SD increase in firm-level avoidable missed minimum probability implies a 9pp increase in likelihood of offering card

	Ever Mentions Card (0 or 1) x 100			
	(1)	(2)	(3)	(4)
Wgt Avoidable Missed Min Prob. (SD)	9.107**		7.070*	6.347*
	(3.062)		(3.269)	(3.002)
Wgt Missed Min Prob. (SD)		3.680		
		(3.014)		
Log (total stores)	6.266*	5.263^{+}	10.961***	8.807**
	(2.642)	(2.722)	(2.900)	(2.697)
Firm-Wght Income Per Capita (SD)			−9.855*	-8.177^{+}
			(4.741)	(4.203)
Mean Outcome	32.47	32.47	32.47	32.47
Observations	194	194	194	194
FE Controls	2-Digit Naics	2-Digit Naics	2-Digit Naics	2-Digit Naics
Weights	By Stores	By Stores	By Stores	
R2	0.195	0.172	0.220	0.208

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

- **Intensive Margin:** firms with more expected missed minimums offer higher ongoing rewards at main store

Data

Credit Bureau Data
- Panel of all debts for US sample
- Includes tradeline-level industry code indicators to distinguish between general purpose and retail cards

10-K SEC Filings
- Use text to identify if firm has credit card partnerships

Dun & Bradstreet/ Safegraph
- Identify store locations for aggregating credit bureau data to firm-level

Credit Card Rewards
- Manually collected rewards for retail cards
- Data available here:

Takeaways

- Increase in financialization of non-financial firms, why?
- ***Behavioral cross-selling:*** Acquisitional advantage to customers with behavioral biases → cross-selling financial products is profitable
- Document forgetfulness as important mechanism for ↑ missed mins
- Retail firms respond on extensive and intensive margin → more likely to offer cards & cards w/ higher rewards

Contact Info

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- Full paper: