

# Limited and Varying Attention: Evidence from Shocks to the Salience of Overdraft Fees

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# Research Question

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- How do simple shocks to attention affect household financial behavior?
  - Limited attention: people imperfectly acquire/use information when making decisions
  - Relatively little work to date on limited attention and household finance
- Broader: what constitutes sound disclosure policy in banking/financial markets?
  - An important question, particularly now
  - To date, policy typically has focused on one-time, up-front disclosure, assumed that more information is better, and focused on provision of quantitative information

# Overdraft fees

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- Overdraft fee: charge incurred after bank pays a transaction when available funds would not cover it
  - Typically \$25-40 per transaction
  - \$30-40 billion in revenue annually for banks
  - ~75% of explicit deposit account revenue, ~6% of net operating revenue
- Our prior work suggests that many overdraft fees are avoidable without forgoing consumption (Stango/Zinman, AEA P&P 2009)
  - Generally by using a credit card at the point of sale
  - Inattention is a plausible explanation for overdrafts (as are liquidity constraints, irrationality, etc.)

# Policy and Overdrafts

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- Active policy debate about whether overdraft (and other) fees are exploitative
  - ...culminating (for now) in the Fed's recent rule requiring consumer opt-in to overdraft fees
  - ...and in many banks' modifications to overdraft fee policy
- Our view: we don't know much about who incurs overdraft fees, or why
  - Difficult to design sound policy without that information!

# What We Do

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- Estimate dynamics of limited attention in payment of bank overdraft fees
  - A plausible setting in which attention is limited
  - Allow for a “stock” of attention that builds/decays over time
  - Ask whether within-consumer variation in attention explains overdrafting
- Use variation in survey content as shock to attention
  - Panel of transaction-level checking acct. data on consumers
  - Panel members frequently offered choice to take surveys, some of which mention overdrafts
  - Detailed data on surveys taken, survey content, fees paid within consumer over time

# What We Find

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- **Baseline results:**
  - Taking an overdraft-related survey reduces probability of overdraft by ~3.0% on a mean of ~30% within survey month
  - Taking multiple surveys builds a “stock” of attention that reduces overdraft probability by 1.5% per survey taken in last 24 months
  - Mechanisms: Fewer low-balance transactions, “autodebits”
- **Content matters:**
  - Stronger effects when survey is more “overdraft-focused”
  - Smaller but significant effects when questions ask about spending control, other fees, monitoring balances

# Our Data

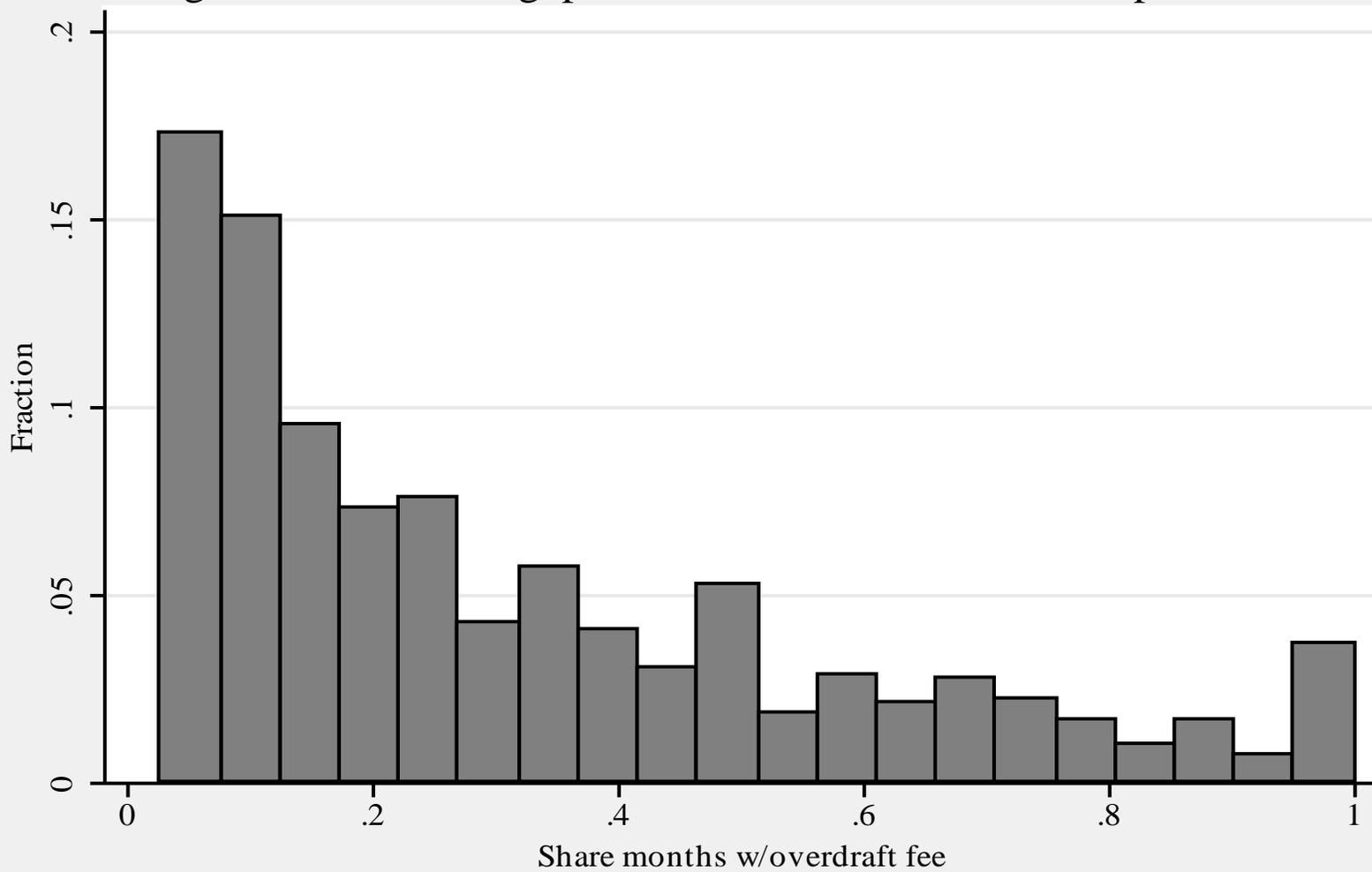
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- Collected by Lightspeed Market Research (ex-Forrester Research)
  - Panelists come from larger stable of market research subjects
  - 102,334 active panelist/months, 7448 active panelists, roughly 3500 panelists in data each month
  - Checking “statement data”: every accounting debit and credit on the account, by transaction type (check, fee, etc.)
- At signup, panelists complete a “registration survey” covering many standard demographics
  - Our panelists are younger, more-educated, higher-income, more female than average
  - More creditworthy (conditional on age), more likely to use electronic payments and online financial management

Table 1. Sample and overdraft fee frequency

	All Active	Ever paid OD fee
Panelists	7448	3860
Panelist-months	102334	60096
Median months per panelist	16	19
Share panelists with any overdraft fee ever	0.52	1.00
Share panelist-months with OD fee	0.16	0.31
Share panelist-months with balance <\$100	0.72	0.83
Any "snowball" month with 5+ OD fees?	0.15	0.28
Share "snowball" months with 5+ OD fees	0.03	0.06
Prob. of OD fee given 1+ OD fee last month		0.54
Prob. of OD fee given 5+ OD fees last month		0.81

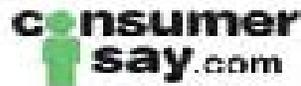
Figure 2. Overdrafting, panelists with at least one in-sample OD fee.



# Periodic Surveys

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- Panelists periodically invited to take online surveys
  - Few dozen questions on each
  - Roughly quarterly, 2004-2008
  - Small financial incentive to take survey (gift card lottery)
  - 20-30% response rate
- Survey topics not preannounced
  - Email invite, click through and take online...
- Some surveys ask questions on bank overdrafts
  - E.g., “Do you have overdraft protection?”, “What, if anything, frustrates you about your primary bank...”
  - Not informative in the standard sense
  - One survey does focus almost exclusively on overdrafts
  - Others ask about related issues (balances, fees, etc.)



**\$panelPersonal.getFirstName(),**

You are invited to participate in a new ConsumerSay survey!!

**Name:** Consumer Opinion Survey #13

**Time:** 10 minutes

**Reward:** An entry in a drawing to win one of twenty \$25 Amazon® Gift Codes

Just sign in to your Members Page and access the link to the survey.

**SIGN IN**

**Your Username:** \$panel.emailAddress

**Your ConsumerSay.com Password:** \$panel.password

If you cannot view the button above, please copy the link below and paste it in your browser:

<http://www.consumersay.com>

If you have any problems or questions, please respond to this email. Enter the name of the survey in the subject line.

We look forward to your participation!

**ConsumerSay**

Table 2. Survey timing and content.

Survey month/year	Overdraft fees or protection	Monitoring balances	Other bank fees	Spending control	Responses in sample
Aug04				yes	379
Oct04			yes		571
Jan05			yes		591
Mar05	yes		yes		631
Jun05					935
Aug05	yes				926
Sep05			yes		1317
Dec05	yes	yes	yes		1184
Mar06			yes	yes	1455
Jul06				yes	781
Aug06 (OD)	yes			yes	843
Aug06 (non-OD)					505
Oct06	yes				828
Nov06	yes	yes	yes	yes	686
q12007*					2008
Apr07		yes			1406
Aug07			yes		1502
Feb08		yes	yes		1010
Jul08			yes		1399
Oct08					961
Dec08				yes	1113

# Empirics

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- How does attention affect household financial behavior?
  - How does taking a survey asking about overdraft fees reduce the likelihood of incurring a fee, now and later?
- Outcome (LHS): monthly 0/1, “incurred overdraft fee”
  - Nothing interesting happens on the intensive margin
- Identifying variation:
  - Within-panelist: before/after survey
  - Across panelists: responders vs. non-responders
  - Across surveys: overdraft-relevant vs. “any”

# Empirical Model

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$$\begin{aligned} ODFee_{it} = & \beta_1 TookODSurvey_{it} + \beta_2 TookAnySurvey_{it} + \\ & \beta_3 ODSurveys_{it} + \beta_4 AnySurveys_{it} + \\ & Panelist_i + Moyr_t + PanelistMoyrs_{it} + \varepsilon_{it} \end{aligned}$$

- OLS, panelist (i) month (t)
- Fixed panelist, month/year, months in sample effects
- “TookXXSurvey”: immediate one-month effect
- “XXSurveys” variables: 2-year stock effects
- OD=overdraft, Any=any
- Any=1 when OD=1

# Results

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- Taking an overdraft-related survey has an *immediate effect* on probability of overdrafting in that month (“immediate effect”):
  - ~3.0 percentage points on 30 percentage point mean
- The number of overdraft-related surveys taken in the last two years leads to a cumulative reduction in probability of overdraft (“stock effect”):
  - ~1.5 percentage points per survey taken in last two years
- Effects are (weakly) larger among those with little education, low financial literacy
  - Though, these are the groups who overdraft most

# Mechanisms, Robustness

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- How do people achieve fewer overdrafts?
  - Days with “low balances” relatively constant
  - *Transactions* on days with low balances fall, more so for those with history of overdrafting
  - Some evidence of reducing “autodebits”
- Content matters
  - Bigger effects of overdraft-focused survey
  - Smaller but significant effects of related question topics: spending control, other fees, monitoring balances
- No effects on intensive margin (# ODs, given OD)

# Conclusions

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- Simple, non-informative reminders can change household financial behavior
  - Effects may be substantial in demographic groups that overdraft the most
  - Variation in content matters
  - Consumers can respond in either high- or low-frequency ways
- Useful but far from conclusive re: policy
  - Non-standard policy/strategy implication: up-front disclosure can be augmented substantially with (arguably) low-cost reminders
  - However: welfare implications are not clear