

Interventions to Improve Financial Behavior Discussion

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New Research

- Jeremy Burke. 2018. “Do Prize Linked Incentives Promote Positive Financial Behavior? Evidence from a Debt Reduction Intervention”
- Paul Adams, Andrea Caflisch, Michael D. Grubb, Darragh Kelly, Jeroen Nieboer and Matthew Osborne. 2018. “Time to act: A Field experiment on overdraft alerts”
- *(If time)* Andrea Caflisch, Michael D. Grubb, Darragh Kelly, Jeroen Nieboer and Matthew Osborne. 2018. “Sending out an SMS: The impact of automatically enrolling consumers into overdraft alerts”

A standing ovation

- Amazing field experiments with notable principles:
 - Size ensures statistical power (please report)
 - Design is scalable in the event of success
 - In partnership with non-profit and public agencies
 - On topics of likely interest to academics and policy-makers
 - With excellent research products for both communities
 - And commitment (along with the FDIC) to disseminating findings, regardless of “results”
- And a recipe for promoting experimental success:
 - “New” offering means no reduction in any services
 - No reduction in consumer autonomy
 - Minimal costs (tell us more) - minimal benefits too?
 - Apple pie (sort of)

Do Prize Linked Incentives Promote Positive Financial Behavior? Evidence from a Debt Reduction Intervention

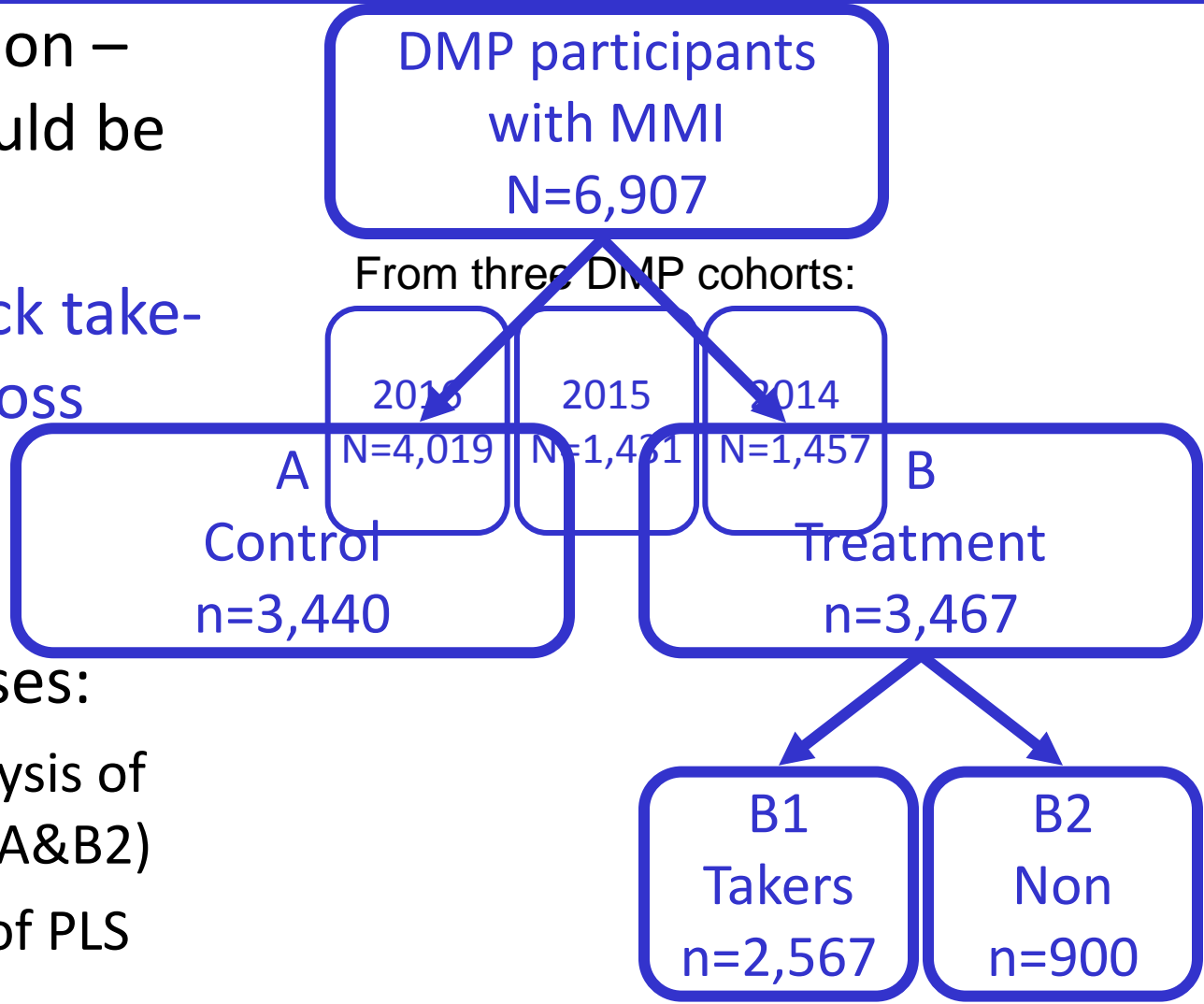
Jeremy Burke

Prize Linked Incentives - Summary

- Field experiment on Prize Linked Savings (PLS) accounts
- Partnering with non-profit credit counseling agency
- For clients with a debt management plan (1/3 succeed)
- Random individuals (n=6,907) offered:
 - Chance to win monthly drawing of \$500 towards DMP
 - Chance to win grand prize drawing of \$10,000 towards DMP
 - Monthly newsletter listing winners and providing reminders

Prize Linked Incentives - Design

- Good randomization – ITT estimates should be valid
- Strong (74%), quick take-up decreasing across cohorts
- Three main analyses:
 1. Descriptive analysis of take-up: B1 vs. (A&B2)
 2. Casual analysis of PLS effects: B vs. A
 3. Take-up: B1 vs. B2



Prize Linked Incentives – Comments 1

- Analysis 1: Descriptive regressions estimate the relationship between take-up and outcomes
- PLS Participants enjoy better outcomes:
 - With their DMPs (Magnitudes ~10%)
 - Are Table 2 outcomes (e.g., Active vs. Drop Out) mutually exclusive?
 - Outcomes converge in post-incentive period
 - And their credit outcomes
 - Could T3 and T2 results really be measuring the same thing?
 - Endogeneity limits the utility of these results
- Consider instead elevating your discussion of the takers' characteristics (Analysis 3, Table 12)

Prize Linked Incentives – Comments 2

- Analysis 2, experimental (causal) results are generally 0:
 - DMP discussion nicely documents precision:
*The corresponding confidence intervals rule out increases in on-time payments of **1.4pp**, reductions in dropout of 1.3pp, and reductions in DMP balance of approximately 132 dollars, all very minor differences relative to the average behavior observed over the course of the incentive period.*
 - Same goes for the credit outcomes:
95% confidence intervals preclude decreases in charge-offs of approximately 190 dollars, decreases in late payments of 1.2 payments, increases in credit score of 2 points, and reductions in nonmortgage debt of approximately 1250 dollars.
 - Do the same for the main estimates (odd numbered columns)
- Add cross-sectional ITT and TOT (IV)
- Consider heterogeneity analysis by demographic characteristics and baseline credit outcomes

Prize Linked Incentives – Comments 3

- How to reconcile your results with existing research
 - Esp. of Cole, Iverson & Tufano (2018) & Gertler et al (2018)
 - U.S. vs. RSA/Mexico? Banks vs. DMPs?
- Extensions:
 - Develop an aggregated outcome (DMP + Credit report debt)
 - Estimate “rent” from the program
 - Exploit lottery winners’ geographic location (Cole, Iverson & Tufano 2018) to estimate externalities
- More policy discussion:
 - No “beneficial” effects, but no harmful ones either
 - PLS still worth regulating in light of average (null) and subgroup (TBD) effects?
 - Let firms test & decide?

Sending out an SMS: The impact of automatically enrolling consumers into overdraft alerts

Andrea Caflisch, Michael D. Grubb, Darragh Kelly, Jeroen Nieboer and
Matthew Osborne

FCA Occasional Paper 36
May 2018

Sending out an SMS - Summary

- 2 natural experiments on overdraft notifications:

How do unpaid item and unarranged overdraft alerts work?

Unpaid items (retry) alert



1. Bank sees consumer has insufficient funds for scheduled transaction



2. Bank sends consumer an alert message (typically in AM)



3. Consumer can transfer funds before PM cut-off time to enable transaction

Unarranged overdraft alert



1. Consumer's balance dips below £0 or arranged overdraft limit



2. Bank sends consumer an alert message (typically in AM)



3. Consumer can transfer funds before PM cut-off time

- Consider specifying Step 4 in each process

Sending out an SMS - Results

Table 6 – Summary of impact of automatic enrolment on all outcomes

Outcome variable (monthly basis)	Relative Effect (Bank A)	Relative Effect (Bank B)
Unpaid item charges	-21% (baseline £1.12 per month)	-24% (baseline £0.32 per month)
Unarranged charges	-	-25% (baseline £0.98 per month)
Number of unarranged overdraft episodes	n/a	-14.9% (baseline 0.03 episodes per month)
Number of unarranged overdraft episodes longer than 1 day	n/a	-19.7% (baseline 0.02 episodes per month)
Arranged overdraft charges	-	-
Average balance	-	-
Minimum balance	-	-
Mobile banking log ins	-	-
Number of scheduled transactions	-	+3% (baseline 8.37 transactions per month)
Number of transactions	-	-

Notes: Estimates are only reported for statistically significant effects at the 5% level.

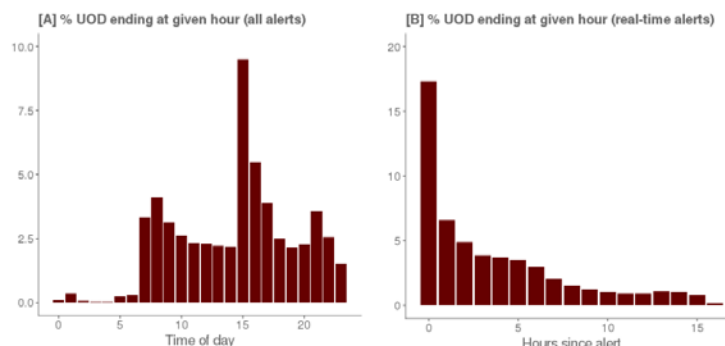
Sending out an SMS - Comments 1

- Empirical strategy:
 - DD checks are nicely done – check CIs on graphs
 - Try clustering at treatment level (tenure groups) – small #?
- Alternative specifications:
 - DD: rollout vs. Already Enrolled; Small vs Large PCAs (fn20)
 - IV for opt-ins
- Interpretation:
 - Multiple hypothesis testing
 - Show more tests of equality of effects
 - Lower bound (technology & consumer learning) vs. Upper bound (diminishing marginal returns & attention)
 - Sample adjustments are transparent, but may limit external validity?

Sending out an SMS - Comments 2

- Extensions:
 - Any bank and/or consumer responses in the post-period?
 - Regressive policy effects: 1) requires a mobile number;
2) *“We find less convincing evidence that the alerts are helpful in reducing charges for those most likely to incur charges...”*
 - More heterogeneous treatment analyses (e.g., by demographics) – would require different specifications
 - More discussion of mechanisms & explanations:
 - Procrastination and/or scarce time for response pooling?

Figure 3: Response to alerts on the first day in unarranged overdraft



- Naifs vs. Sophisticates given incidence among those not signed up

Time to act: A Field experiment on overdraft alerts

Paul Adams, Andrea Caflisch, Michael D. Grubb, Darragh Kelly, Jeroen Nieboer and Matthew Osborne

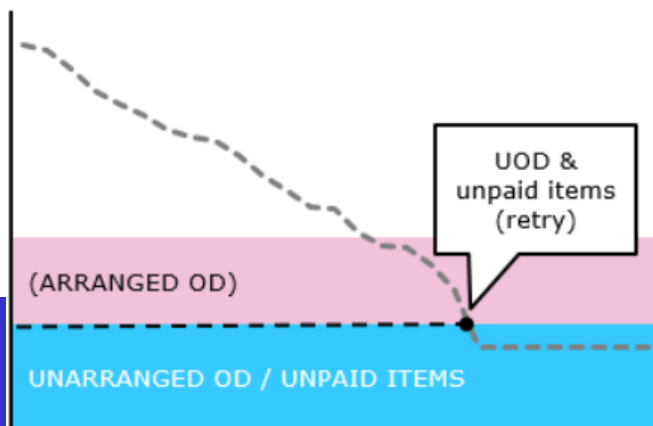
FCA Occasional Paper 40
July 2018

Time to Act - Summary

- 4 field experiments (RCTs) on overdraft notifications:

Figure 1: Overview of trials

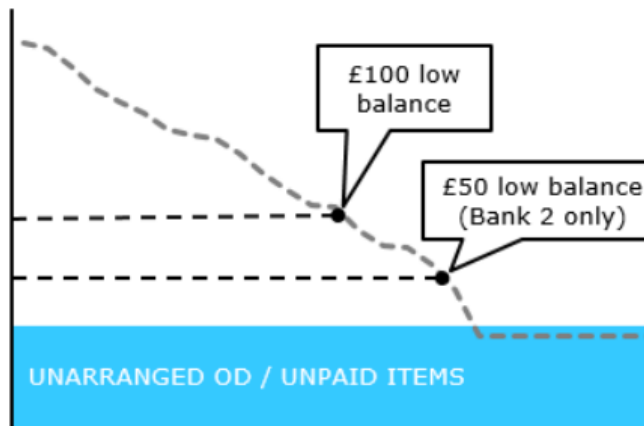
A: Unarranged OD and unpaid item alerts for all consumers (bank 2 only)



UD & UI charges decrease 12-18%

(as in other paper)

B: Low balance alert for consumers with unarranged OD only



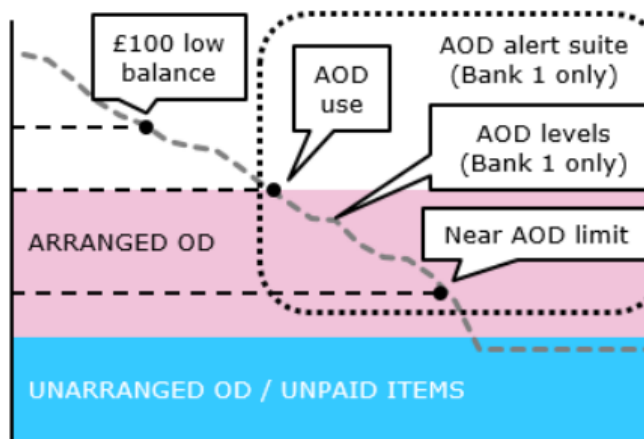
No effects on using OD

C: Low balance alert for consumers with no OD facility (bank 1 only)



No effects on charges + No demand

D: Low balance and usage alerts for consumers with arranged & unarranged OD



UD & UI charges decrease 3-8%. + No Alert Effects

Time to Act - Comments

- Comments:
 - No effects on subjective financial well-being (small fees?)
 - Minority (4-7%) disliked alerts; Higher among opt-outs (20-33%)
 - Response options (e.g., informal lending) highlight the need for more aggregated measures
- Extensions:
 - More discussion of alert fatigue – any way to know how many other alerts they receive? Any Trial interactions?
 - More discussion of mechanisms & explanations
 - ***Keep up the great work:***

As technology improves and the use of A/B testing of digital tools such as alerts increases, we can expect more firms to conduct this sort of research to help inform product development. But these are important techniques for regulators, too. Digital interventions can be relatively quickly and easily tested, allowing regulators the ability to quickly learn about what works and what doesn't, as well as increase the scale, scope and complexity of field experiments.