

# THE SEMBLANCE OF SUCCESS IN NUDGING CONSUMERS TO PAY DOWN CREDIT CARD DEBT

ASSOCIATION FOR CONSUMER RESEARCH (ACR) 2022

**BENEDICT GUTTMAN-KENNEY (CHICAGO BOOTH)**

PAUL ADAMS (LONDON SCHOOL OF ECONOMICS)


STEFAN HUNT (COMPETITION & MARKETS AUTHORITY)

DAVID LAIBSON (HARVARD)



NEIL STEWART (WARWICK BUSINESS SCHOOL)

*NOT NECESSARILY REFLECTING POSITIONS OF THE FCA OR CMA.*

## THE SEMBLANCE OF SUCCESS IN NUDGING CONSUMERS TO PAY DOWN CREDIT CARD DEBT

-  Ex-ante test of potential nudge regulation.
  - UK Financial Conduct Authority (FCA).
  - Aiming to reduce credit card debt.
  - Pre-registered RCT in field of 40k new credit cards.

# THE SEMBLANCE OF SUCCESS IN NUDGING CONSUMERS TO PAY DOWN CREDIT CARD DEBT

-  Ex-ante test of potential nudge regulation.
  - UK Financial Conduct Authority (FCA).
  - Aiming to reduce credit card debt.
  - Pre-registered RCT in field of 40k new credit cards.
-  'Semblance of Success'
  - **Large proximate** effects on choices.
  - **No distal** effects on real outcomes.
  - Offsetting consumer responses.
  - Dynamic liquidity constraints.

# REPEATEDLY ONLY PAYING CREDIT CARD MINIMUM IS COSTLY

## MINIMUM PAYMENT CALCULATION

*Minimum payment =  $\max\{\text{£}5, \text{total interest} + \text{fees} + 1\% \text{ balance}\}$*

# REPEATEDLY ONLY PAYING CREDIT CARD MINIMUM IS COSTLY

## MINIMUM PAYMENT CALCULATION

*Minimum payment =  $\max\{\pounds 5, \text{total interest} + \text{fees} + 1\% \text{ balance}\}$*

**Example: £1,000 debt** (18.9% APR, no further spending)

| Payment         | Time to Repay Debt (years,months) | Interest Cost |
|-----------------|-----------------------------------|---------------|
| Minimum Payment | 18,6                              | £1,265        |

# FIXING MONTHLY PAYMENTS ABOVE MINIMUM PRODUCES BIG SAVINGS

## MINIMUM PAYMENT CALCULATION

*Minimum payment =  $\max\{\pounds 5, \text{total interest} + \text{fees} + 1\% \text{ balance}\}$*

**Example: £1,000 debt** (18.9% APR, no further spending)


| Payment         | Time to Repay Debt (years,months) | Interest Cost |
|-----------------|-----------------------------------|---------------|
| Minimum Payment | 18,6                              | £1,265        |
| £25             | 5,1                               | £509          |
| £50             | 2,0                               | £191          |

## AUTOPAY MIN: AUTOMATIC MINIMUM PAYMENTS

Repeated minimum payers often enrolled in **Autopay Min** (type of 'Autopay'/'Direct Debit')

Repeated minimum payers often enrolled in **Autopay Min** (type of 'Autopay'/'Direct Debit')


Autopay Min (Sakaguchi et al., 22 *JMR*)...


 **'Good'**: Near-perfect insurance vs. forgetting to pay (£12 late fee, interest cost, credit score impact)



Repeated minimum payers often enrolled in **Autopay Min** (type of 'Autopay'/'Direct Debit')

Autopay Min (Sakaguchi et al., 22 *JMR*)...

 **'Good'**: Near-perfect insurance vs. forgetting to pay  
(£12 late fee, interest cost, credit score impact)

 **'Bad'**: Inattention to debt  
(little debt paydown, non-salient accrual of interest,  
effort cost of manual payment)

**DESIGN**

# CONTROL: AUTOPAY ENROLLMENT OPTIONS (OPT-IN)

## Autopay Min, Autopay Full, & Autopay Fix options (or none)

### Pay your card bill

Make a payment

Set up a Direct Debit

To set up a Direct Debit you'll need to be the account holder and be able to authorise payments from the account.

Not the account holder or need joint signatures? Just download the Direct Debit instruction form fill it out and return it to us by post. If your joint account only needs one signature, just complete the form below.

### How much would you like to pay each month?

The amount will be reduced by any payments received since your last statement

#### ☐ The minimum

It will take longer and generally cost more to clear your balance this way. If you make extra payments, your direct debit will only collect the difference needed to reach the minimum

#### ☐ Statement amount

You will clear your balance this way. If you make extra payments your direct debit will only reduce the difference to your last statement

#### ☐ This much

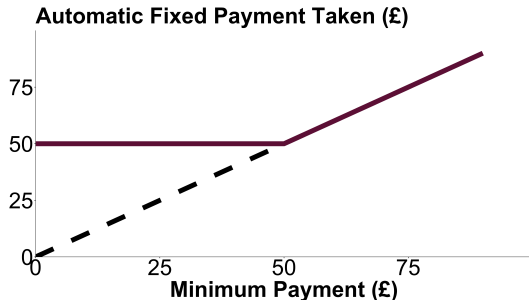
£

We'll collect your fixed amount or the minimum payment due, whichever is the greater. If you make extra payments, your direct debit will still collect the fixed amount or the remaining balance if this is lower

## WHAT IS AUTOPAY FIX (AUTOMATIC FIXED PAYMENT) OPTION?

*Automatic fixed payment taken =  $\max\{\text{Autopay Fix } \pounds \text{ amount, minimum payment}\}$*

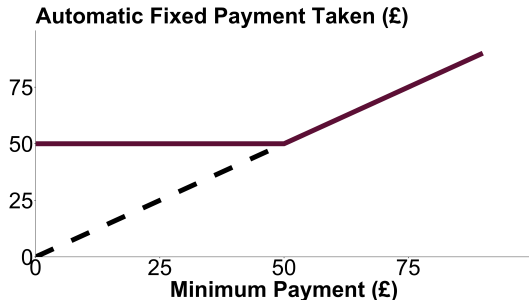
E.g. £50 Autopay Fix



# WHAT IS AUTOPAY FIX (AUTOMATIC FIXED PAYMENT) OPTION?

*Automatic fixed payment taken =  $\max\{\text{Autopay Fix } \pounds \text{ amount, minimum payment}\}$*

E.g. £50 Autopay Fix



£5 Autopay Fix  $\equiv$  Autopay Min

*Why? Minimum payment =  $\max\{\pounds 5, \text{total interest} + \text{fees} + 1\% \text{ balance}\}$*

# TREATMENT: NO EXPLICIT AUTOPAY MIN OPTION

## Autopay Full & Autopay Fix options (or none)

### Pay your card bill

Make a payment

Set up a Direct Debit

To set up a Direct Debit you'll need to be the account holder and be able to authorise payments from the account. Not the account holder or need joint signatures? Just download the Direct Debit instruction form fill it out and return it to us by post. If your joint account only needs one signature, just complete the form below.

### How much would you like to pay each month?

The amount will be reduced by any payments received since your last statement



#### Statement amount

You will clear your balance this way. If you make extra payments your direct debit will only reduce the difference to your last statement



#### This much

£

We'll collect your fixed amount or the minimum payment due, whichever is the greater. If you make extra payments, your direct debit will still collect the fixed amount or the remaining balance if this is lower

Increase Autopay Fix enrollment

Increase Autopay Fix enrollment



Increase automatic payments



## TREATMENT DESIGNED TO AUTOMATICALLY REDUCE DEBT

Increase Autopay Fix enrollment



Increase automatic payments



Increase payments above minimum

## TREATMENT DESIGNED TO AUTOMATICALLY REDUCE DEBT

Increase Autopay Fix enrollment



Increase automatic payments



Increase payments above minimum



Decrease debt + interest costs

## TREATMENT DESIGNED TO AUTOMATICALLY REDUCE DEBT

Increase Autopay Fix enrollment



Increase automatic payments



Increase payments above minimum



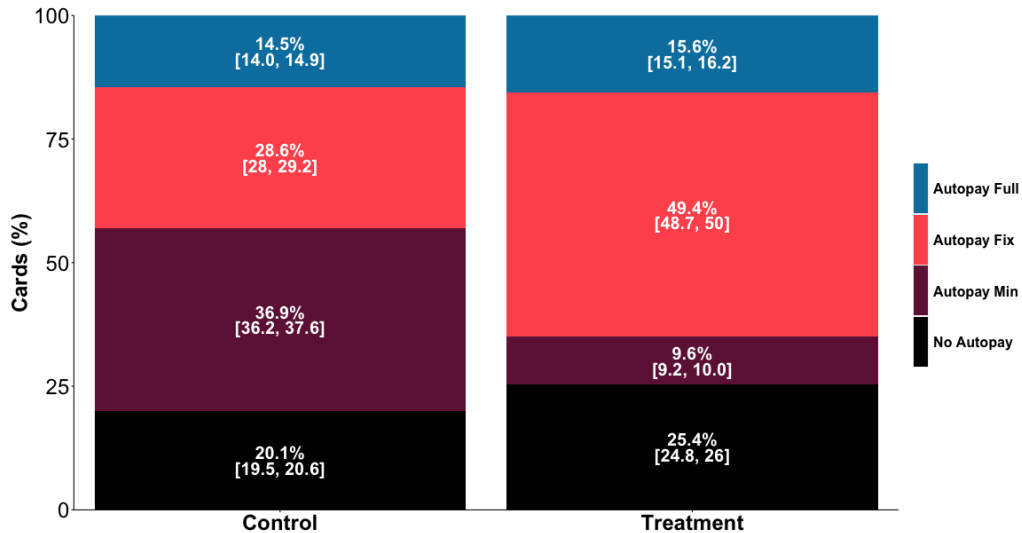
Decrease debt + interest costs

### **Linked Administrative Data:**

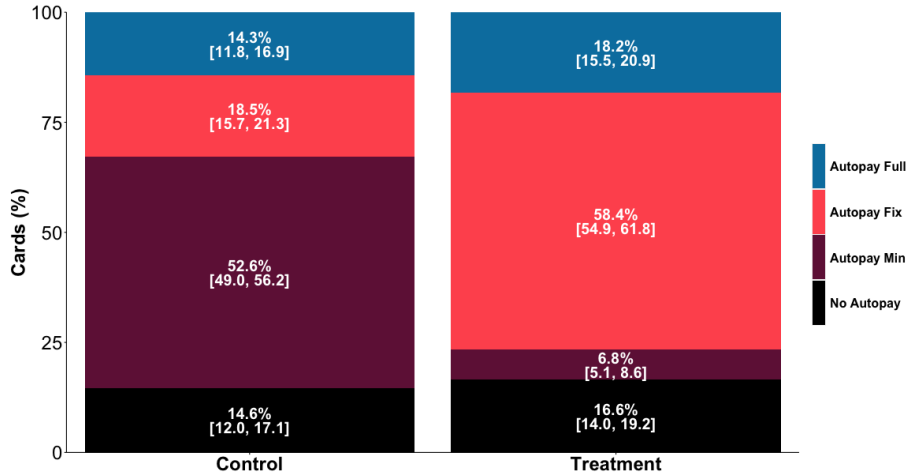
(1) Credit cards. (2) Credit Files (3) Checking/Savings.

# **RESULTS: PROXIMATE EFFECTS**

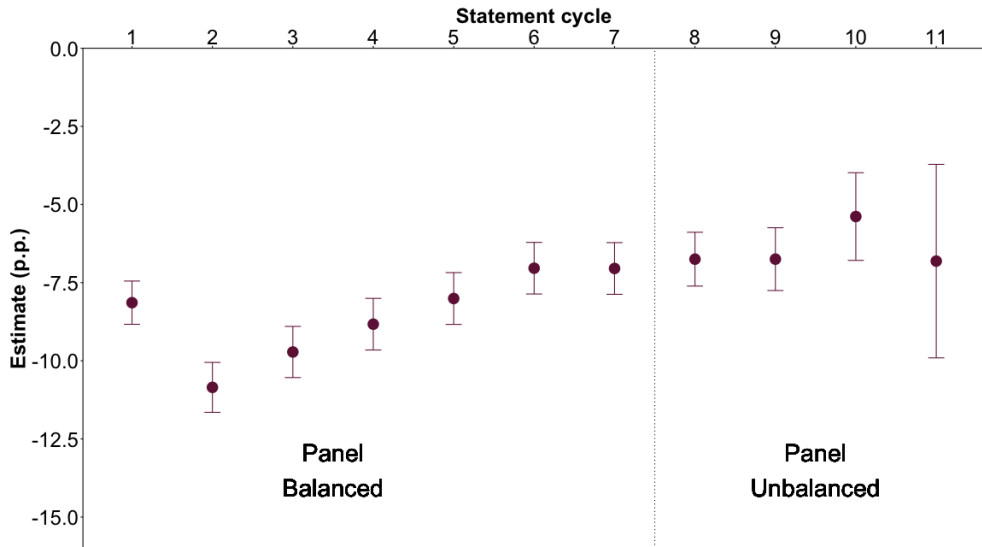
## +21PP (+72%) AUTOPAY FIX ENROLLMENT (STATEMENT 2)



# PROXIMATE EFFECTS SO LARGE, A SECOND LENDER WITHDREW FROM THE EXPERIMENT AFTER 1 WEEK!



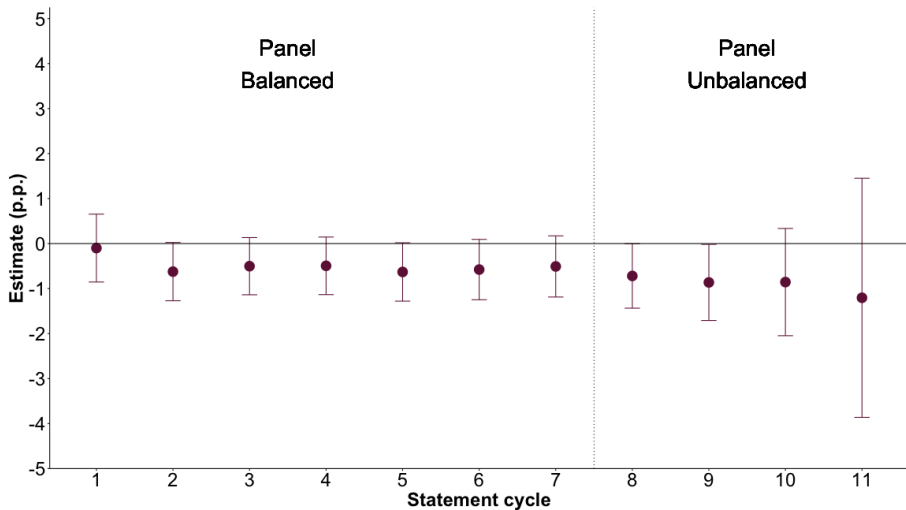
## -7PP (-24%) PAYING EXACTLY MINIMUM (AFTER 7 STATEMENTS)



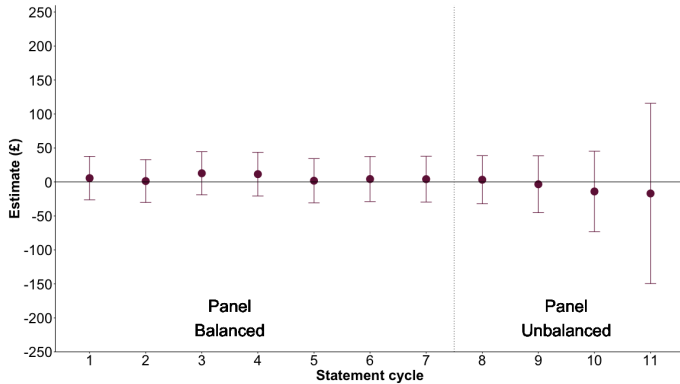
# **RESULTS: DISTAL EFFECTS**



# NO CHANGE IN DEBT (AFTER 7 STATEMENTS)



# NO CHANGE IN DEBT OR OTHER OUTCOMES (AFTER 7 STATEMENTS)



Precise **zero ATEs** on other primary or secondary outcomes (after 7 statements).

# WHY NO DEBT REDUCTION?

### 3 OFFSETTING CONSUMER RESPONSES

#### 1. Binding Autopay Fix

*Automatic fixed payment taken =  $\max\{\text{fixed } \pounds \text{ amount, minimum payment}\}$*



**+17 pp** Autopay Fix enrollment

### 3 OFFSETTING CONSUMER RESPONSES

#### 1. Binding Autopay Fix

*Automatic fixed payment taken =  $\max\{\text{fixed } \pounds \text{ amount, minimum payment}\}$*

 **+17 pp** Autopay Fix enrollment

but only...

 **+8.7 pp** where Autopay Fix not binding at minimum

(after 7 statements)

### 3 OFFSETTING CONSUMER RESPONSES

1. Binding Autopay Fix amounts

**2. Drop-Out: Autopay enrollment ↓**

### 3 OFFSETTING CONSUMER RESPONSES

1. Binding Autopay Fix amounts

2. **Drop-Out: Autopay enrollment** ↓ (statement 7)

 **-4.3 pp Any** Autopay enrollment

### 3 OFFSETTING CONSUMER RESPONSES

1. Binding Autopay Fix amounts

2. **Drop-Out: Autopay enrollment** ↓ (statement 7)

 **-4.3 pp** Any Autopay enrollment

 **+0.4 pp** missing (forgetting) 1+ payment



### 3 OFFSETTING CONSUMER RESPONSES

1. Binding Autopay Fix amounts

2. **Drop-Out: Autopay enrollment** ↓ (statement 7)

 **-4.3 pp** Any Autopay enrollment

 **+0.4 pp** missing (forgetting) 1+ payment

 **ZERO** missing 2+ or 3+ payments

### 3 OFFSETTING CONSUMER RESPONSES

1. Binding Autopay Fix amounts
2. Drop-Out: Autopay enrollment ↓
- 3. Crowd-Out: Manual payments ↓**

 Automatic payments ↑, manual payments ↓,  
nets out at zero. Manual payments infrequent *but* large.

 **Large proximate** effects on consumer choices

↑ enrollment

↓ paying minimum

 **No distal** effects on real economic outcomes (e.g. debt)

3 offsetting consumer responses

(binding, drop-out, crowd-out).

### 3 TAKEAWAYS: REGULATION, NUDGES + CREDIT CARDS

#### 1. REGULATION IS HARD

- Informational nudges also ineffective.

(e.g. Agarwal et al. 15 *QJE*, Seira et al. 17 *AEJ: EP*, Adams et al., 22 *Economica*)

### 3 TAKEAWAYS: REGULATION, NUDGES + CREDIT CARDS

#### 1. REGULATION IS HARD

- Informational nudges also ineffective.

(e.g. Agarwal et al. 15 *QJE*, Seira et al. 17 *AEJ: EP*, Adams et al., 22 *Economica*)

#### 2. MEASURE DISTAL EFFECTS OF NUDGES

- Large proximate effects on choices  $\nrightarrow$  change consumer economic outcomes.
- Consumers less inert than may appear: offset nudges.

### 3 TAKEAWAYS: REGULATION, NUDGES + CREDIT CARDS

#### 1. REGULATION IS HARD

- Informational nudges also ineffective.

(e.g. Agarwal et al. 15 *QJE*, Seira et al. 17 *AEJ: EP*, Adams et al., 22 *Economica*)

#### 2. MEASURE DISTAL EFFECTS OF NUDGES

- Large proximate effects on choices  $\nrightarrow$  change consumer economic outcomes.
- Consumers less inert than may appear: offset nudges.

#### 3. MEASURE DYNAMIC LIQUIDITY CONSTRAINTS

- Consumers frequently face binding constraints. Predict lower repayments.

THANK YOU!

 [@gk\\_ben](https://twitter.com/gk_ben)

 [benedict@chicagobooth.edu](mailto:benedict@chicagobooth.edu)

 [benedictgk.com](http://benedictgk.com)

**BONUS CONTENT UNLOCKED**



## WHY DON'T CONSUMERS PAY MORE? MEASURING LIQUID CASH.

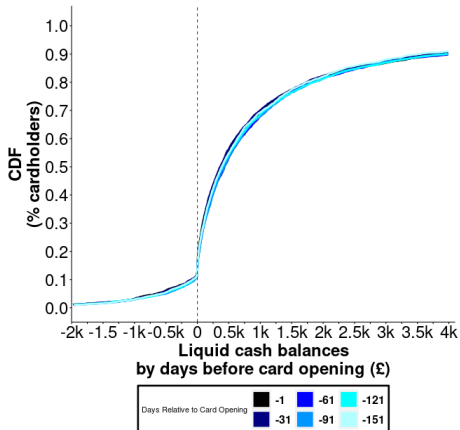
**Daily Liquid Cash Balances =**

Sum of balances in checking & cash savings accounts.

# WHY DON'T CONSUMERS PAY MORE? 1 IN 10 HAVE NO LIQUID CASH.

## Daily Liquid Cash Balances =

Sum of balances in checking & cash savings accounts.



## WHY DON'T CONSUMERS PAY MORE?

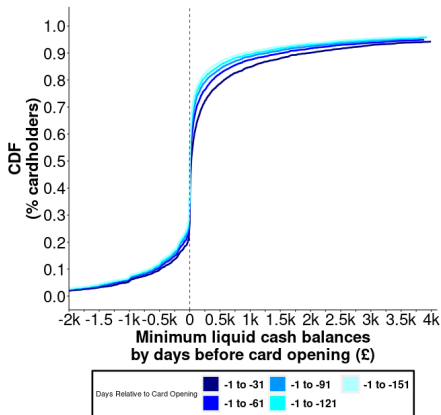
 **Minimum Liquid Cash Balances** =  
Minimum {Daily Liquid Cash Balances} over 30 days.

 where **Daily Liquid Cash Balances** =  
Sum of balances in checking & cash savings accounts.

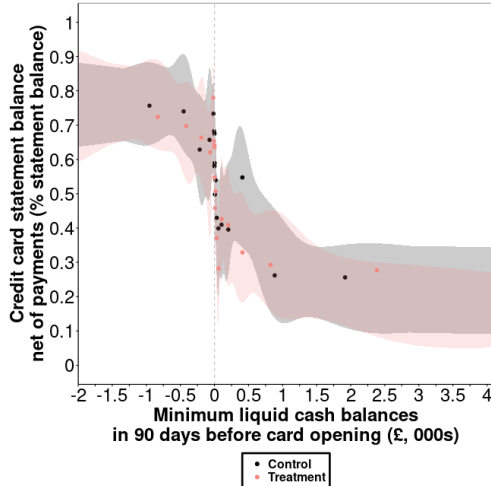
# WHY DON'T CONSUMERS PAY MORE?

## HALF HAVE NO LIQUID CASH AT LEAST ONE DAY PER MONTH.

**Minimum Liquid Cash Balances** = Minimum {Liquid Cash Balances} over 30 days.



# MORE FINANCIAL CONSTRAINTS PREDICT MORE REVOLVING DEBT



THANK YOU!

 [@gk\\_ben](https://twitter.com/gk_ben)

 [benedict@chicagobooth.edu](mailto:benedict@chicagobooth.edu)

 [benedictgk.com](http://benedictgk.com)