The Semblance Of Success In Nudging Consumers To Pay Down Credit Card Debt

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Not necessarily reflecting positions of the Financial Conduct Authority (FCA), AFM or CMA.
Credit card experiment

Ex-ante test of potential regulation by UK Financial Conduct Authority (FCA) to reduce persistent credit card debt holding.

Pre-registered RCT with behaviorally-informed treatment.

Field experiment on 40.7k credit cards from large UK lender.

2nd UK lender stopped after one week of fieldwork.
Fixing monthly payments above minimum produces big savings

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

<table>
<thead>
<tr>
<th>Payment</th>
<th>Time to Repay Debt (years,months)</th>
<th>Interest Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>£25</td>
<td>18,6</td>
<td>£1,265</td>
</tr>
<tr>
<td>£50</td>
<td>5,1</td>
<td>£509</td>
</tr>
<tr>
<td></td>
<td>2,0</td>
<td>£191</td>
</tr>
</tbody>
</table>

MINIMUM PAYMENT CALCULATION

Minimum payment = max{£5, total interest + fees + 1% balance}
Repeated minimum payers often enrolled in **automatic minimum payments** (type of ‘Autopay’/‘Direct Debit’)

Automatic minimum payments...

‘Good’ - prevent forgetting to make payment
‘Bad’ - little debt pay down

[Sakaguchi, Stewart, & Gathergood, 2018]
DESIGN
**CONTROL:** Automatic payment options when open credit card (opt-in)

Automatic minimum, full + fixed payment options (or none)

### Pay your card bill

<table>
<thead>
<tr>
<th>Make a payment</th>
<th>Set up a Direct Debit</th>
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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 ‘automatic fixed payment’ option?

Automatic fixed payment taken = max{fixed £ amount, minimum payment}
E.g. £50 automatic fixed payment

£5 automatic fixed payment ≡ automatic minimum payment

Why? Minimum payment = max{£5, total interest + fees + 1% balance}
TREATMENT: No explicit automatic minimum payment option

Automatic full + fixed payment options (or none)

Pay your card bill

- Make a payment
- Set up a Direct Debit

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- **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
TREATMENT DESIGNED TO AUTOMATICALLY REDUCE DEBT

Increase automatic fixed payment enrolment

↓

Increase automatic payments

↓

Increase payment above minimum

↓

Decrease debt + interest costs
RESULTS
+21pp (+72%) automatic fixed payment enrolment (statement 2)
-7pp (−24%) paying exactly minimum (after 7 statements)
NO change in debt (after 7 statements)
WHY NO DEBT REDUCTION?
3. Offsetting consumer responses

1. Automatic fixed payments set ‘too low’

+17 pp automatic fixed payment enrolment

but only...

+8.7 pp where fixed payment not binding at minimum

(after 7 statements)
3.offsetting consumer responses

1. Automatic fixed payments set ‘too low’

2. Manual payments decrease
Decomposing for subset with automatic payments (endogenous, non-causal estimate)

Automatic payments increase, manual payments decrease, zero net effect

Non-Causal Estimate on Cumulative Payments Across Cycles 1-7,

£

Automatic Payments

Automatic + Manual
Additional manual payments infrequent but large

Of those with automatic payments set up...

..Manual payments are...

**INFREQUENT**: 8.5% make a manual payment
Additional manual payments infrequent but large

Of those with automatic payments set up...
..Manual payments are...

**INFREQUENT**: 8.5% make a manual payment

**LARGE**: 40% of total (automatic+manual) payment value

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<tr>
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<th>Automatic Payment</th>
<th>Manual Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Payment Value</td>
<td>£110</td>
<td>£440</td>
</tr>
<tr>
<td>Median Payment Value</td>
<td>£50</td>
<td>£120</td>
</tr>
</tbody>
</table>

Note: Mean, median conditional on positive payment and rounded to nearest £10.
3. offsetting consumer responses

1. Automatic fixed payments set ‘too low’
2. Manual payments decrease
3. Enrolment in any automatic payment fell

-4.3 pp any automatic payment enrolment

+0.3 pp missing (forgetting) a payment
Takeaways

I. REGULATION IS HARD
Sometimes evidence-based policy to not make policy. Test big interventions. But which? How much evidence needed?

II. CONSIDER OFFSETTING EFFECTS OF NUDGES
Offsetting effects can reduce effectiveness of nudges. Measure longer-term outcomes not just initial choices.

III. MORE RESEARCH INTO CREDIT CARD BORROWING
Borrowers less inert than first appeared. Rational inattention? What motivates + constrains timing + amounts of manual payments?
The Financial Impact of Dementia: Evidence from Credit Report Data
Joanne Hsu, Federal Reserve Board of Governors

Discussant Presentation
Phil Armour, RAND