## **Financial Conduct Authority**

Research Note

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Helping credit card users repay their debt: a summary of experimental research

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## Summary

One in four credit card payments are only at the contractual repayment amount (or just above it).<sup>1</sup> Given the scale of the credit card market - £70 billion<sup>2</sup> held in outstanding debt across over 30 million card holders<sup>3</sup> - this is an important problem. Occasionally making a minimum payment may not be problematic, allowing consumers to manage payments in a temporary tight spot. Yet if consumers repeatedly make minimum (or very low) repayments there is little pay down of their credit card debt, meaning that high interest costs can quickly accumulate. Persistently carrying debt can also create other problems such as negatively affecting people's credit scores<sup>4</sup> or mental health.<sup>4</sup>

We designed a research programme to test ways to help consumers repay their credit card debt faster. Given the importance of this issue, we designed the research to be as robust and rigorous as possible. We worked with world leading academics in economics and psychology and used our experience in running experimental research in consumer financial decision making. We partnered with four credit card providers to test our designs in the field and, where that was not possible, we used hypothetical online experiments. Our designs were informed by qualitative research and stakeholder engagement and we conducted an online survey to further understand some of our findings. This was a large and complex programme examining the repayment behaviour of over 200,000 consumers who were involved in the experiments. From this we produce a comprehensive view of what could work, what doesn't - and why not - to help consumers to repay their credit card debt faster.

Our research designs were initially inspired by the efforts of US policymakers, which required lenders to include information on the costs of repeated minimum repayments. This information was found it to produce little, if any, reduction in credit card debt.

We tested whether information can be more effective for UK consumers by refining the designs of the US disclosures and targeting groups who might be most likely to benefit. But we go further than disclosures. We also changed the environment in which people make decisions on how much to pay.

## **Key findings**

Consumers can make payments in two ways – manually at any point in the month (eg through online payments), or automatically by setting up a 'Direct Debit'. In both cases, consumers must pay a contractual minimum amount. We know from previous research that this minimum amount can have the effect of dragging down the repayment choices consumers make – a psychological concept known as anchoring or targeting.

In our research, we found that removing the minimum repayment amount from the manual repayment screen had a large positive effect in two online hypothetical experiments. It significantly increased the value of repayments made. In a separate, real-world test, providing information on monthly statements had no effect at all on manual repayment amounts. This was similar to results in the US.

In a real-world test of credit card users, removing an explicit option for the minimum amount from the direct debit setup screen was less successful. It did cause many more people to choose higher direct debit amounts as intended, and did move people away from minimum payments, but it did not reduce credit card debt. This is partly because consumers offset higher automatic payments with lower manual payments and partly because it discouraged some people from setting up a direct debit at all. Targeting information to consumers with a direct debit already set up for the minimum amount caused only a small decrease in minimum payments and did not reduce debt.

The research adds to our understanding of how effective disclosure is in changing behaviour. It also confirms findings in other contexts - such as pension auto-enrolment that changing the context of choices can have a dramatic effect on decisions. Importantly, some of our findings suggest that initial effects on choices do not always translate into similarly dramatic effects on consumer outcomes.

The rest of this note summarises the research and our key findings in more detail. It is intended for interested stakeholders in public policy and regulation. For academic readers and for those interested in the full technical details of the research, please read Occasional Papers 42, 43, 44 and  $45.^{5,6,7,8}$ 

## **Consumers' credit card repayment behaviour**

Why are credit card payment amounts so important? Unlike most other credit products, credit cards do not have fixed monthly payments, so consumers are required to choose how much to repay each month. A minimum repayment is legally required and many consumers pay this amount - approximately one in four credit card payments in the UK is at or near the contractual minimum.<sup>1</sup>

The minimum amount covers fees, interest and at least one percent of the balance, or  $\pounds 5$ , whichever is larger. As the minimum repayment amount is based on a percentage of the balance, it reduces as the balance reduces. Consequently, when repaying only the minimum or close to it, repayment times can become very long, leading some credit card users to hold debt and pay interest for many years. A balance of  $\pounds 1,000$  would take 18 years and 9 months to repay with the minimum payment. In fact, as of January 2015, customers of 5.1 million accounts would be paying off their debt for more than ten years (assuming no further borrowing and similar repayment patterns).<sup>1</sup> The effects can be stark. Consumers who pay off their debt slowly spend much more on interest, potentially falling further into debt. They may also have lower credit scores, risking their future ability to borrow.

Some people may choose to make minimum or low repayments because they can't afford to pay more. For those with 0% interest deals, deferring payments may also be a rational choice. However, many people repaying the minimum are probably not making a conscious or rational choice. For example, people are present-biased, demonstrating an extreme preference to consume now and pay later, which can be made worse by their overconfidence about the intention to pay more in the future.<sup>9</sup> Some credit card users misunderstand the minimum repayment amount, believing that it would allow them to repay their debt in a timely manner or that it is a recommendation or norm.<sup>10</sup> Credit card providers include the minimum payment amount on bills and online payment screens, often offering payment of the minimum as an explicit option. Previous research shows that when people see the minimum amount when choosing a repayment amount it leads them to pay less than they otherwise would.<sup>11</sup> It has been suggested that the minimum repayment amount acts like a psychological 'anchor'.<sup>12</sup> This is a mechanism whereby people's decisions are biased towards values that are initially presented to them, even when these numbers are actually irrelevant.<sup>13</sup>

As a part of the FCA Credit Card Market Study, we committed to a programme of research to help consumers actively choose the amount they pay on their credit card.<sup>14</sup> We aimed to achieve:

- a significant and sustainable reduction in the proportion of repayments at the contractual minimum;
- a significant and sustainable increase in the nominal value of credit card repayments across credit card users.

Here we describe the series of experiments we carried out to increase manual payments and direct debit payments.

# **Changing bad habits? – manual payments**

Because most credit card repayments in the UK are made manually, influencing this repayment choice can potentially deliver significant benefits.<sup>1</sup> We tested two remedies designed to increase consumers' manual repayments.

## Statements: presenting the facts

In the US, lenders are required to disclose on credit card statements the repayment times and costs for only repaying only the minimum amount, alongside scenarios to repay the debt more quickly. This has been found to have only a limited effect on repayment.<sup>15</sup> We wanted to test the effect of a similar disclosure in the UK.<sup>7</sup>

Working with a credit card provider, we ran a randomised controlled trial on nearly 30,000 real consumers with no direct debit. We tested adding a box on credit card statements which showed, in a graph, the time to pay off credit card debt if the consumer continued to pay only the contractual minimum, compared to paying off debt in one, two or three years. We also tested the same information, but also added in the associated borrowing costs (Figure 1). To help design the box, we got feedback from a consumer focus group. Participants in the group reported that they found the graphical displays of payment times and interest costs for minimum repayment 'shocking'.

### Figure 1: Disclosure included on credit card statements

### Clear your balance faster

Did you know that if you pay a little over your minimum payment amount each month, you can pay off your credit card a lot faster?

See the example on the right

The easiest way is to set up a direct debit for a fixed amount. Use our payment calculator to work out the best amount, based on what you can afford. Then just sign in to online service to set up your direct debit - it's easy to amend at any time.



Despite this consumer response, when included on statements, the information had no effect on repayments at the minimum or the nominal value of repayments.

## **Removing the anchor**

When making manual repayments, consumers usually see the minimum payment amount as an option. We asked firms to work with us to test removing this minimum payment option from their online payment screens with real customers. However, no firms could run the exact design of the trial we wanted in the timescales we needed. Instead, we used two hypothetical online experiments to replicate previous studies by removing the minimum repayment amount from the manual payment screen.<sup>10</sup> Our replications involved more participants than previous studies, ensuring that we could have greater confidence in the results.

In the first study, we constructed a mock-up of an online repayment screen, and asked around 700 participants to decide how much of a hypothetical bill they would repay, given their financial situation at the time (Figure 2).<sup>5</sup> We tested the removal of the minimum payment amount from this screen. Participants who initially chose low repayments (from 0 to fifty percent more than the minimum) were also shown a prompt which offered options for higher payments.



### Figure 2: Hypothetical bill payment screen

Our second study involved real credit card users which allowed us to link the responses to real-world behaviour.<sup>6</sup> This was also a hypothetical bill paying exercise, but was given to around 8,000 credit card consumers through an online survey, using a replication of the lender's real repayment screen. We tested the removal of the minimum payment amount and an explicit option to pay the minimum amount. This obliged consumers to actively choose to pay their debt in full or some other amount they could afford to repay.

Results from both experiments were consistent with previous research – the presence of a minimum payment amount had a large effect on consumer choice, increasing repayments. For the first online experiment (see Figure 3), removing the minimum payment amount increased the value of repayments made by nearly 20%. Following the low payment prompt, only one person chose to pay less than the minimum.



### Figure 3: Distribution of repayments as a percentage of balance

In the second experiment, we observed the participants' real-life balances and repayment choices, which allowed us to compare hypothetical and real payment choices. We found that the consumers' choices in the hypothetical experiment were consistent with their real-life choices. For example, people choosing to repay in full or to only pay the minimum amount also tended to do so in real life. Also, those who had more financial difficulties in real life were also less likely to pay more than the minimum in the experiment. We also saw similar effects regardless of whether the hypothetical card balance was high or low. These findings gave us even greater confidence that choices in a hypothetical setting are likely to translate to real-life choices.

# Sleepwalking into debt? – direct debit choice

Around 42% of credit card repayments in the UK are made by direct debit.<sup>10</sup> People's initial choice of direct debit amount is important, as they rarely change it. We wanted to test whether we could help people make a more informed choice of their direct debit amount. In one trial, we targeted consumers who already had a direct debit set up to pay the minimum.<sup>7</sup> In a second, we attempted to influence the choice of new customers as they set up a direct debit.<sup>8</sup>

# Shocking consumers into action: Helping existing consumers change their repayment amount

We sent targeted communications (letters and emails) to customers who had direct debits set up to pay the minimum amount. We believed it was likely that this group had disengaged from their repayments, and that the information could have the most impact on this group. The communications included the chart and information shown in Figure 4. As with the trial on statements, it showed the timescales and costs for repaying only the minimum, compared to paying off debt in one, two or three years. We personalised the scenarios to the credit card user.

### Figure 4: Disclosures sent to consumers with minimum payment direct debits

See the chart • To see how much you could save

It's easy to increase your

monthly payments:

 Ask in branch
Call 0800 111 1122 Lines are open 24 hours a day, 7 days a week

Log on to Internet Banking



Your credit card number

#### A quicker way to repay your balance

Dear

You are currently set up to pay the minimum payment for your credit card by Direct Debit every month. This can be a useful way to manage your monthly budget, but if you continue to pay just the minimum amount, it can take much longer to clear your balance and it will cost you more in interest.

See the difference an increased fixed payment could make Even a small increase in the amount you pay each month can speed up how quickly you repay your balance.

The examples below are based on your September statement balance of €3,127.43 and your minimum payment of €89.23. It shows how different monthly payments could reduce the time it takes to pay off your card.

Monthly direct debit amount

€292	1 year to repay balance and paying £373 in interest
£162	2 years to repay balance and paying £741 in interest
£119	3 years to repay balance and paying €1,132 in interest
Minimum	Over 28 years to repay and paying £5,340 in int

These figures are approximate and are based on your September statement balance. They assume that you do not continue to spend using your card or make any new balance transfers, and that your current interest rates remain unchanged. The minimum payment reduces down as your balance goes down. We found a small but significant decrease in payments made at the minimum, two statement cycles after receiving the communication. This was equivalent to between 1 and 2 in every 100 cards switching from the minimum payment to a fixed payment direct debit. The effect was consistent across the three lenders (Figure 5), but reduced over time. Anecdotally, firms told us that this compares well with the response rates for direct marketing campaigns that they run.

## Figure 5: Reduction in people paying only the minimum amount for people who recieved the disclosures, compared to those who didn't



However, we didn't see any robust changes in payment amounts. We also saw no changes in other outcomes we measured, which include borrowing costs, missed payments, full payments, spending or size of debt. Figure 6 shows debt levels (after repayments) over nine months.





## Designing better defaults: Helping new customers

When setting up a direct debit, firms generally offer customers the minimum repayment amount as a specific option (Figure 7). We believed that removing this option would increase the salience of the alternative option to pay a fixed amount.

We ran a randomised controlled trial in the field on over 40,000 new credit cards. Half of the new customers saw a screen which included the minimum option and the other half received our intervention, where we removed the specific minimum repayment option. If people chose a fixed amount which at any point was less than their minimum owed for that month, the minimum amount was taken – this was explained as in the mock-up in Figure 7. In addition, if people tried to choose a fixed direct debit amount which was less than  $\pm 5$ , then they were shown a prompt that informed them that  $\pm 5$  was the lowest fixed direct debit they could choose.

## Figure 7: Direct debit set up screen – our intervention removed the minimum repayment option

1ake a payment	Set up a Direct Debit		
<b>ow much would</b> e amount will be red	<b>you like to pay eac</b> duced by any payments	<b>h month?</b> received since your last statement	
It will take lon more to clear way. If you ma your direct de the difference minimum	imum ger and generally cost ryour balance this ake extra payments, ebit will only collect e needed to reach the	• 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

to select the minimum

Removing the minimum option had a large and significant effect on consumers' choice of direct debit amount (Figure 8). When the minimum repayment option was removed, about 1 in 5 cards chose a fixed repayment instead of a minimum repayment. Removing the minimum also resulted in a small but significant increase in people choosing full payment direct debits. Paying a direct debit set to the minimum was not eliminated as individuals receiving our intervention could still set these up, for example by calling the bank.



### Figure 8: Choice of direct debit

Over seven months we observe actual repayments. In the group receiving our intervention, in the 7<sup>th</sup> month, there were roughly 7 in 100 less people paying the minimum. There are two reasons for the difference in the number initially choosing a fixed payment and those actually paying the minimum after 7 months. First, there was some take-up of fixed payment direct debits in the group not receiving our intervention over time. And second, because credit card balances were growing, the minimum payment amount catches up with the fixed payment amounts that some people set.

Contrary to our expectations, an increase in people choosing fixed direct debit repayments did not increase overall repayment amounts over the 7 months we observed. As a result, we saw no change in other financial outcomes, including debt and spending, on either the credit card in the trial or on other cards these consumers held.

We were surprised that there was no change in total debt held, despite the very large change in direct debit choices. We found our treatments have two effects which counteracted the effect of the initial higher direct debit choice:

- Removing the minimum payment option caused some people to opt out of setting up a direct debit at all. Without any automatic payment set up, these consumers were more likely to forget to make a manual payment, or if they did remember, they are more likely to make a payment that was close to the minimum. This subgroup of people brings down the average payment and increased the average debt of the group receiving our intervention. It also resulted in a very small increase in arrears in the treatment group.
- Those who set up higher fixed direct debit payments because of our intervention subsequently made lower manual payments. This effect is most important in explaining why we saw no change in debt from our interventions.

Overall, this means that the effect of our treatment on payments and debts averaged out to zero, across all consumers in the trial. This demonstrates the importance of collecting data that most closely match to consumers' outcomes over a long enough period, to be sure that initial changes in behaviour are long lasting and relevant.

The substitution of increased direct debit payments with decreased manual payments suggests that influencing direct debit choice alone is not sufficient to achieve our aims.

# Conclusions

This research has helped us to understand the effect of different policy options on consumers. We built on previous academic work which suggests that the minimum payment amount can act like an anchor, and confirmed this in two online experiments in realistic environments and with real credit card users. Removing the minimum repayment amount had a dramatic effect on peoples' choices by increasing repayments. We found that this hypothetical choice was consistent with their real choices.

We saw a similarly dramatic effect on choices when we remove the explicit option to set a direct debit for the minimum amount. However, we found that this dramatic effect on direct debit choice did not translate into better outcomes due to two countervailing factors associated with the direct debit consumer journey. Insights such as these are particularly important when designing effective policy.

The finding that initial choices do not translate into tangible outcomes for consumers is important. A narrower trial, based on fewer consumer outcomes and a shorter time period would not have captured the full implications of the counter-acting effects.

Finally, the research confirms that consumer behaviour is quite difficult to change through either generic or targeted disclosures. By testing a range of potential policy options intended to change consumer behaviour, we can say with some confidence what works and what doesn't. This can help us design more effective interventions, and avoid intervening in ways which do not add public value.

## Endnotes

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