Financial Conduct Authority

More than Reminders: Empowering Pawnbroking Staff for Better Customer Outcomes

April 2025

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FCA research notes in financial regulation

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Acknowledgements

We are grateful to our partner firm for their invaluable collaboration, support, and openness throughout this research. Their willingness to innovate and implement new practices was essential to the success of this study. We also thank Richard Dorsett for his expert contribution in conducting power calculation simulations, ensuring the robustness and reliability of our trial design.

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Equality and diversity considerations

We have considered the equality and diversity issues that may arise from the proposals in this Research Note.

Overall, we do not consider that the proposals in this Research Note adversely impact any of the groups with protected characteristics i.e. age, disability, sex, marriage or civil partnership, pregnancy and maternity, race, religion and belief, sexual orientation and gender reassignment.

Contents

1 Summary

This report examines the effectiveness of a behavioural intervention designed to increase surplus collection rates for pawnbroking customers. Surpluses are funds owed when a pawned item sells for more than the loan amount. Despite existing processes to notify consumers of surpluses, an FCA report (FCA, 2018) found that over £1 million in surpluses remained unclaimed annually (based on a small sample of firms).

Using a novel behavioural design approach, in partnership with a firm, we developed two interventions. The first was a new reminder letter for customers, which was found to nearly double collection rates in 30 days. We report the full design process and results for the letter study in Occasional Paper 59 (FCA, 2021). Here, we present the second intervention - a store-side 'flag' which automatically notifies staff when a customer, who is owed a surplus, returns to a store. We evaluated the effectiveness of this flag through a Randomised Controlled Trial (RCT), in partnership with the firm.

We found that giving staff more information, in an easy to use and salient format, increased surplus collection rates by nearly 44%. The surplus flag provides a strong example of a low-cost, scalable solution that supports improved consumer outcomes and removes barriers to action—even amidst challenges such as Covid-19 restrictions affecting collection timelines. This report highlights the importance of proactive design in achieving better outcomes by influencing both customer and staff behaviours. Our findings demonstrate that behavioural research applies not only to encouraging positive consumer actions, but also to shaping firm practices that support those outcomes. This study contributes to the growing body of evidence on the role of behavioural science in improving financial outcomes for consumers.

Notably, following our study, the firm implemented the system flag across all of its stores and, combined with further process changes, now has surplus average collection rates of just over 75% compared to the 16% rate found in our control group. We note that many firms may have updated their processes in light of the Consumer Duty to enhance surplus collection rates in the period since our study, and may now have similar actions in place.

2 Research Context

If a customer fails to redeem (repay) a pawnbroking loan, the pawnbroker can sell the customer's pledge (the collateral item) to recover their costs. Any money that is raised above the outstanding debt is known as a 'surplus'. Legally, this surplus money must be made available to the customer and the customer must be notified that they can collect this money from the pawnbroker. Any unpaid surplus is held in a separate account and the pawnbroking firm has no incentive to keep it (it is held as dormant funds and is not treated as firm profits). However, an FCA sector review found that surplus collection rates varied widely among firms, and some firms had returned less than half of this surplus money to customers. Around £1 million in surpluses remained unclaimed annually (FCA, 2018).

Through collaboration with a firm, we set out to understand why consumers were not collecting all surpluses owed and re-designed the surplus notification letter sent to the firm's customers. We tested the effectiveness of the redesigned surplus letter in a Randomised Controlled Trial (RCT) and reported on the results Occasional Paper 59 (FCA, 2021). We also observed and surveyed staff in stores and found they had competing demands when serving a returning customer, and that surplus collection might not be top of mind. We found there was no way for staff to quickly see which customers were owed a surplus. To remedy this, we also designed a novel, store-side intervention which gave staff the information needed, in a salient and clear format, to repay surpluses to returning customers when owed. This took the form of a pop-up box on store terminals (a 'flag') with the amount owed, relevant customer details and required staff actions.

This approach not only addresses a clearly identified market issue but also contributes new evidence on the potential of empowering staff with timely, salient and clear information to help consumers.

3 Research Design and Methodology

Intervention design

Occasional Paper 59 (FCA, 2021) details the research and behavioural design process we used to develop the surplus flag intervention. This involved user research including in-store interviews with staff and customers, observation of transactions and exploration of communications and IT systems. The user research helped us understand the drivers of low surplus collection rates. For example, we discovered that:

- Very often customers do not provide (correct) contact details such as phone numbers and email addresses or they may change their address but not update the pawnbroker. This could result in letters being sent to a past address or not being able to make reminder calls.
- There may be a lack of understanding or awareness of the process; being owed a surplus is counter to peoples' mental models of borrowing money from a firm.
- The length of time of the whole process means that some people might simply forget about the good(s) or the money and adapt to life without it.
- The Pawnbroker's staff's knowledge of the surplus process was generally lower compared to the rest of the customer journey.
- There is a widely held (false) belief in stores that all customers collected their surplus.
- Surplus collection rates are not covered in the firm Management Information, such as mystery shopping, audits, area manager checklists or Key Performance Indicators.
- There is no way to quickly see at-a-glance how many and which customers are owed surplus or who is owed surplus at an individual level.

Our analysis of the partner firm's data looked at demographic data, loan information and information on surpluses and their collection rates. We found that many customers with outstanding surplus amounts subsequently visit the store without collecting them. We found the majority of pawnbroking customers were repeat users, where 80.1% of items that incurred surplus were pawned by existing customers, and 52% of all the customers in our dataset were repeat customers.

We also found that many customers who had outstanding surplus amounts on their accounts visit the store again without collecting the money. In fact, 37.8% of customers who are owed a surplus visit a store within a year of receiving a surplus notification letter, but do not collect it. We found that the median delay from surplus notification letter to next visit is 50 days, suggesting that most customers would have received a surplus notification letter prior to their next store visit. The subsequent visits were for a variety of reasons, including pawning further items, which would require a staff member to consult the customer's account.

We brought all of our research together in a synthesis workshop to prioritise the ideas according to likely impact and feasibility of implementation. A surplus flag was deemed to

be likely to have a high impact as it would mean customers would be alerted even if they had not received or understood the surplus collection letter and it would give an automatic prompt to staff in store, meaning they wouldn't need to actively seek information about a customer's surplus status. The firm deemed this firm side intervention to be feasible to implement and straightforward for staff to use.

Flag notification and in-store process

The flag consisted of a notification on store IT systems to alert front line staff to pay any outstanding surplus owed to customers when they visit the store. The flag appeared on screen when a customer visited a store for any purpose that requires their account to be accessed (not limited to pawnbroking services). It would first ask the member of staff to confirm the customer had the contract associated with the loan(s) that generated surplus (Figure 1) and then to confirm that they were content that the paperwork was in order before issuing the surplus refund (Figure 2).

Figure 1: Surplus Flag Screen 1

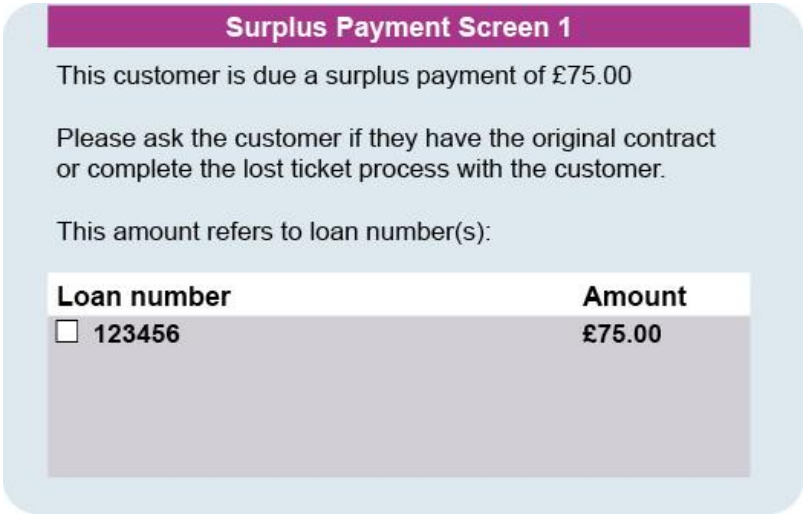
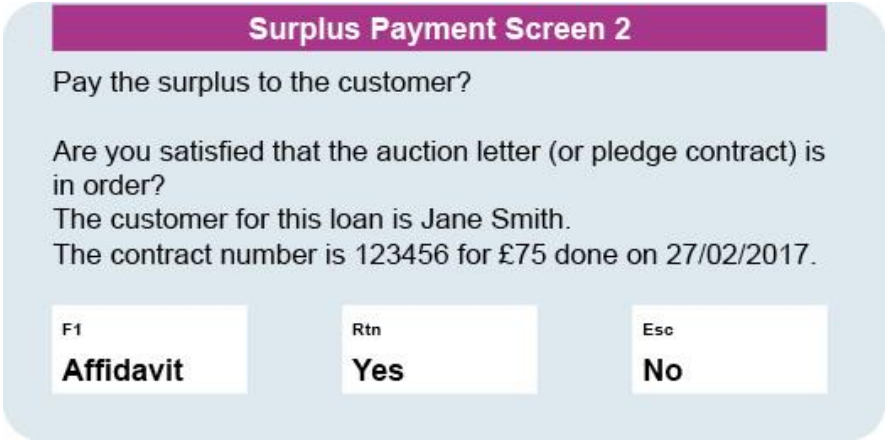


Figure 2: Surplus Flag Screen 2



At the time of our study, the firm required customers to have with them the contract associated with the loan that generated the surplus. If they didn't have the document with them, store staff were able to print this in store for a fee. This fee was £3 for contracts where the original loan amount was under £75 and £5 for contracts where the loan amount was over £75. The customer would then be required to have this document signed by a solicitor, confirming their identity matched that of the loan holder (an affidavit) also for an additional fee. This is one way in which firms can ensure funds are returned to the correct person.

Our hypothesis was that the surplus system flag would increase the surplus collection rate in the treatment group relative to the control group for the period between 30 and 180 days after a surplus being incurred post-auction, and secondarily, that there would be an increase in the total value of paid surplus in the treatment group relative to the control group in the period between 30 and 180 days after a surplus is incurred post auction.

Methodology

To test the effectiveness of the system flag, we conducted a randomised controlled trial (RCT) in partnership with the firm. The stores in the trial were managed at a regional level, meaning that administrative changes also needed to be made at this level. Therefore, for the purpose of this trial, the system flag was implemented at the regional level and we used a clustered RCT approach (Campbell et al., 2012). Half of the regions implemented a surplus system flag on service-side computer screens when service staff accessed a return customer's account details. The other half acted as a control group and there was no change to the database software system. In total, there were 15 regions in the trial and 186 stores. Randomisation was carried out at the region level. 8 regions (96 stores) were randomly allocated to receive the flag treatment, and 7 regions (90 stores) were in the control group.

Our primary outcome measure was whether or not the surplus was paid out to the customer within 180 days of the trial being active. We also recorded the value of the surpluses collected and we explore this as a secondary outcome variable.

Prior to starting the trial, we ran simulations to estimate sample size required to detect an effect of our intervention in a clustered randomised trial. The simulations were based on administrative data on real customer collection rates shared by the firm and the known structure and number of regions and stores. Therefore, they accounted for any potential regional differences in collection rates. This simulation found a minimum detectable effect size of 5 percentage points with a sample of 6403 loans. This formed the basis for our power calculations and, therefore, our decision for how long to run the trial. For further details see Annex 1.

Since the intervention was 'passive' and relied on the customer returning to the store, we were not able to exclude any customers from the treatment or control groups. We took an 'Intention to treat' approach to evaluation and analysed all customers assigned to treatment and control regions (excluding those customers who took out loans in both treatment and control regions – previously estimated to be <1% from our data analysis in our "Discover" phase).

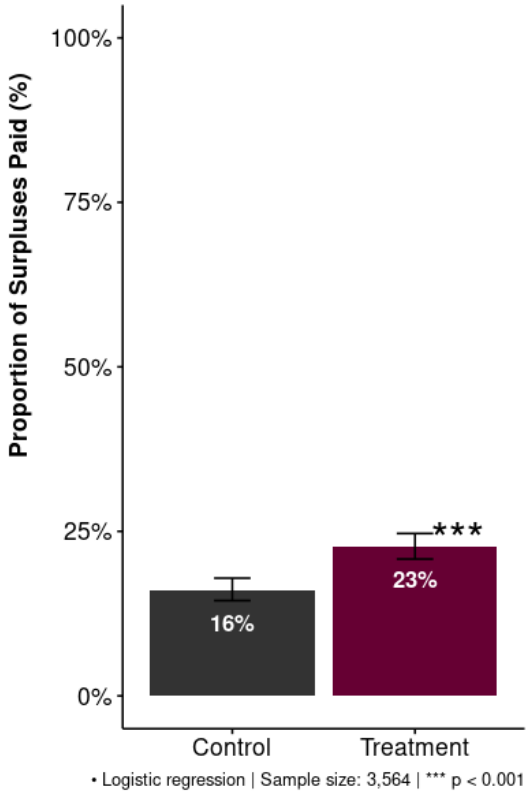
Time period and adjustment for Covid lockdown

We launched the trial in October 2019 and had intended to run it for a continuous 180 days, in order to achieve our required sample size. However, when the first lockdown for Covid-19 came into force in March 2020, auction houses and pawnbroking stores were required to close. For the firm we collaborated with, staged opening of stores started again in May and June 2020 until they were open again in July 2020. There was no regional variation in the re-opening. As a credit lender they were considered an essential service so were allowed to remain open through subsequent stages of lockdown. Given Covid-19's potential differential regional impacts, and our concerns that the pandemic would lead to fewer people returning to stores, we extended the trial timeline significantly to capture more complete data and ensure that any short-term regional differences would not distort overall conclusions. The extended timeline allowed us to gather data through multiple lockdown periods, mitigating the risk of temporary regional shocks affecting the validity of our findings.

4 Results

Our primary outcome shows a statistically significant uplift in collection rates attributable to the surplus flag: rates increase from 16% in the control group to 23% in the treatment group—a 44% improvement (see Figure 3 and Table 1, Annex 2). This result underscores the intervention's efficacy in promoting surplus collection.

Figure 3: Treatment Effects on Surplus Collection Rates



We observe that both treatment and control groups collect larger surplus amounts more frequently, suggesting that surplus value influences collection behaviour (see Table 3, Annex 2). Our intervention proves more effective for moderately large surplus amounts. When we segment surpluses by value, we find no significant treatment effect for amounts over £100. While we are not powered to detect significance in these smaller samples this diminished effectiveness for higher surplus values suggests a plateau in the intervention’s influence as surplus values increase (see Table 1).

Table 1: Treatment effects for sample subsets

Data Subset	Sample Size	Control Rate	Treatment Rate	Intervention Effect	Significance
All data	3564	16%	23%	7%	*** (<0.001)
Surplus £5 or more	2372	24%	33%	9%	*** (<0.001)
Surplus £10 or more	2060	27%	36%	9%	*** (<0.001)
Surplus £50 or more	1335	33%	40%	7%	* (<0.05)
Surplus £100 or more	921	36%	42%	6%	† (<0.1)
Surplus £200 or more	508	42%	41%	-1%	ns (>0.05)

The distribution of surplus amounts offers further insights. A substantial portion of surpluses is relatively minor: 21% are under £1, 33% are below £5, and 50% are under £10. These figures reflect the prevalence of small-value surpluses in the pawnbroking sector (see Figure 4).

Figure 4: Distribution of All Surpluses by Value Bucket

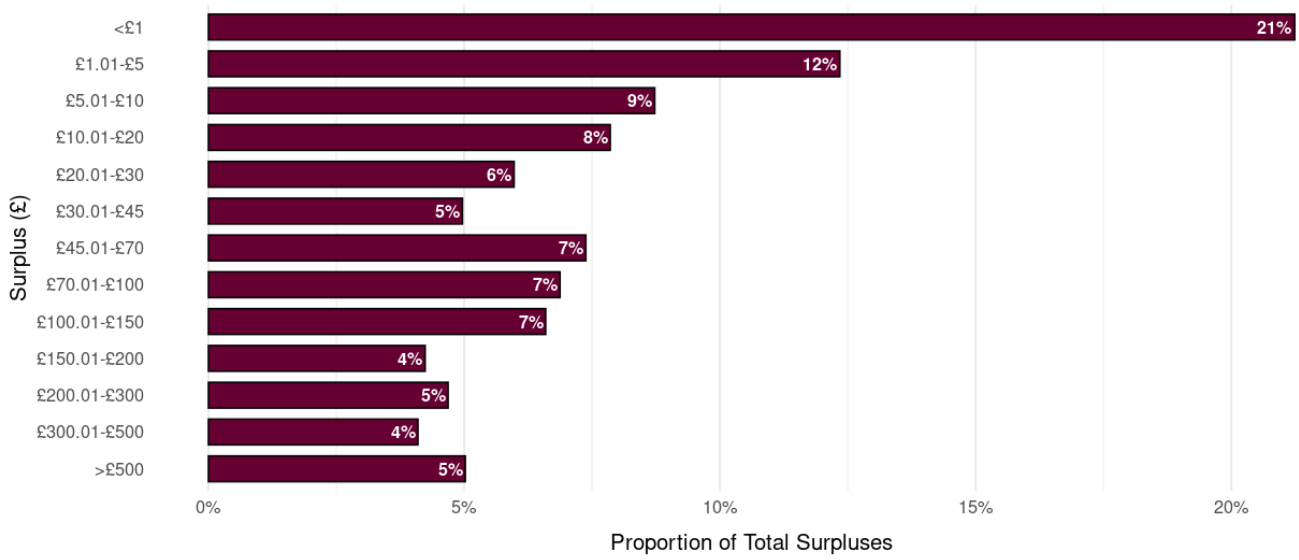
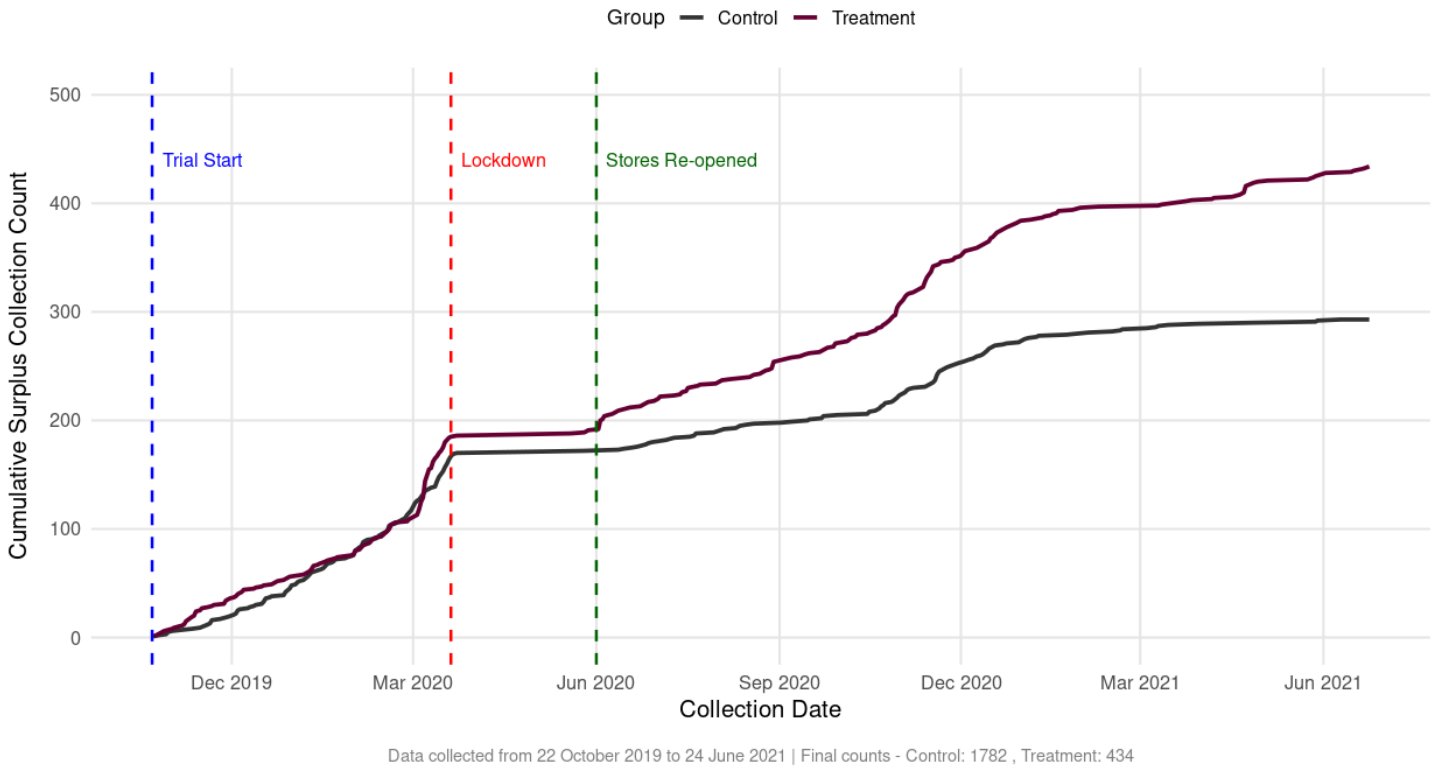


Figure 5 illustrates the effect of the surplus flag over time. During the first few months, from trial launch in October 2019 to the first Covid-19 lockdown in March 2020, we saw little to no difference in collection rates between control and treatment groups. We hypothesise that this is due to the new flag and process, and associated staff training becoming imbedded. Just ahead of lockdown there is a small increase in collection rates in the treatment stores. We then see collection rates pause until all stores open again in June. From June onwards we see a gradual increase in the difference between the treatment and control stores as would be expected with the flag taking effect.

Figure 5: Cumulative Surplus Collections by Group Over Time



Although surplus collection rates increase during the trial, a significant number of large surpluses remain unclaimed, including those for customers who do not visit the store (see Table 2). This outcome highlights ongoing challenges in ensuring that all customers reclaim funds owed to them and suggests that further refinements to the intervention strategy may be necessary.

Table 2: Unpaid surplus counts and value post intervention by treatment

Surplus Bucket	Control Count	Control Total Surplus (£)	Treatment Count	Treatment Total Surplus (£)
Under £5	610	777.87	571	581.52
Over £5	155	1041.03	126	804.79
Over £10	327	7994.28	246	6295.27
Over £50	144	10569.00	138	10641.66
Over £100	138	19632.07	99	13836.38
Over £200	115	67362.60	168	121714.93

5 Discussion

A unique contribution of this study is its focus on supporting store staff rather than consumers, an area less frequently explored in behavioural interventions within financial services. Our research identifies an opportunity to enhance staff awareness and understanding of the surplus process, especially as our original research found many staff assume that surpluses are regularly collected. It gives a scalable, easy to implement solution that makes the surplus collection needs of consumers salient without placing additional burdens on store staff. Furthermore, existing operational processes did not always prioritise or track surplus collections explicitly, meaning opportunities to proactively support customers might not have been fully utilised.

Several contextual factors likely influenced the effectiveness of the surplus flag. For example, behavioural changes linked to the Covid-19 pandemic might have affected customer interactions, while procedural barriers—such as the requirement to present or print a loan contract—added friction to the process.

Following our trial, the partnering firm decided to roll out the flag across all of its stores. They also reviewed their processes, removing the need for the customer to supply a contract for the original loan. Surplus collection rates at the firm have subsequently risen to just over 75% on average. We note that other firms may have made similar changes to their processes in light of the Consumer Duty.

Our findings suggest broader implications for the pawnbroking sector and beyond. By highlighting gaps in staff knowledge and structural barriers in the surplus process, this study underscores the importance of embedding behavioural insights into a firm's operational design—not just focusing on consumer behaviour. Interventions such as the surplus flag demonstrate how low-cost behavioural changes improve customer outcomes. Although the resource demands on firms for taking similar actions would differ by firm size, the costs in this case were not significant.

6 Annexes

Annex 1: Power calculations and analytical approach

Simulations of the data that took into account of the clustering effects of surpluses (at the customer, store, and regional level) confirmed that sufficient statistical power to detect a 10% increase (i.e. from our observed baseline of 18% to 28%) in surplus collection rates was achievable with approximately 3000 surpluses, taking approximately 6 months to observe (based on the historical number of items incurring surpluses per auction from the previously collected dataset). With the system flag, we originally estimated (from the historical visit data) that surplus collection rates would increase from ~18% to ~33% after 50 days post surplus notification, with a further increase to ~48% after 180 days.

Baseline surplus collection rates in our trial were in fact lower than we saw in the administrative data, at 16% in our control group. This was possibly due to changes in behaviour caused by the Covid-19 pandemic. We collected data for 3564 loans, after significantly lengthening the trial period to account for Covid-19 lockdown and restrictions.

Since the intervention was passive and customers were not aware of / recruited into the study until they revisit a store, we were unable to control participant allocation to treatment and control groups. However, since the system flag was implemented at the regional level, the allocation of regions was balanced in order to achieve equal allocation ratios.

We collected outcome information for all customers that incurred surplus during the trial period (e.g. whether a customer in the sample population has collected their surplus in the trial period). Non-compliance with the trial protocol (in this case, customers who incur their surplus in a treatment region, but never visit the store during the trial period and therefore do not receive the treatment) was estimated from the administrative dataset (~45% of customers that incur a surplus do not revisit a store within 1 year). Because the treatment and control groups were implemented at the regional level, there was a potential for treatment-control contamination (customers making visits to stores in both a treatment and control region). However, this was rare, and the administrative datasets suggested only 20 customers will cross regional lines over the period of the trial. These customers were observed during the evaluation phase and excluded from analysis.

To address the above concerns, we utilised three strategies: permutation testing to balance regional characteristics between treatment and control groups; collecting data on customers involved in the trial on a monthly basis from the firm and excluding participants in the trial that appear in both treatment and control groups from further analysis.

To estimate the effect of the surplus flag on our main outcome variables of interest, our primary model is a logit model, we also present the results of a multi-level model (Annex 2), predicting:

(i) Probability of surplus repayment for all customers in the trial.

(ii) Value of amounts collected for all customers in the trial, where treatment and surplus value are individual level fixed effects and the shop (of which there are over 200) and cluster/region (of which there are 16) are random effects.

Annex 2: Mixed Model Analytical Results

Table 3: Collecting surplus during trial period

	Collected_surplus		
Predictors	*Odds Ratios*	*CI*	*p*
(Intercept)	0.22	0.18 – 0.28	**<0.001**
Treatment c [1]	1.50	1.09 – 2.06	**0.012**
Random Effects			
σ^2	3.29		
$T_{00\ Store.No}$	0.73		
$T_{00\ Cluster}$	0.00		
$N_{Cluster}$	16		
$N_{Store.No}$	244		
Observations	3564		
Marginal R^2 / Conditional R^2	0.012 / NA		

Table 4. Collecting surplus during trial period by surplus value

	Collected_surplus		
Predictors	*Odds Ratios*	*CI*	*p*
(Intercept)	0.20	0.16 – 0.26	**<0.001**
Treatment c [1]	1.49	1.09 – 2.04	**0.013**
Auction Surplus	1.00	1.00 – 1.00	**<0.001**
Random Effects			

σ^2	3.29
$T_{00\ Store.No}$	0.70
$T_{00\ Cluster}$	0.00
ICC	0.18
$N_{\ Cluster}$	16
$N_{\ Store.No}$	244
Observations	3564
Marginal R^2 / Conditional R^2	0.023 / 0.195

Annex 3: References

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