Attention, Search and Switching: Evidence on Mandated Disclosure from the Savings Market

July 2016

Occasional paper 19

Encouraging debate among academics, practitioners and policymakers in all aspects of financial regulation.

Financial Conduct Authority
www.fca.org.uk

FCA occasional papers in financial regulation

The FCA occasional papers

The FCA is committed to encouraging debate on all aspects of financial regulation and to creating rigorous evidence to support its decision-making. To facilitate this, we publish a series of Occasional Papers, extending across economics and other disciplines.

Occasional Papers contribute to the debate on specific issues relevant to the FCA's work. The main factor in accepting papers is that they should make substantial contributions to knowledge and understanding of financial regulation. If you want to contribute to this series or comment on these papers, please contact Peter Andrews or Kevin James at peter.andrews@fca.org.uk and kevin.james@fca.org.uk.

Disclaimer

Occasional Papers contribute to the work of the FCA by providing rigorous research results and stimulating debate. While they may not necessarily represent the position of the FCA, they are one source of evidence that the FCA may use while discharging its functions and to inform its views. The FCA endeavours to ensure that research outputs are correct, through checks including independent referee reports, but the nature of such research and choice of research methods is a matter for the authors using their expert judgement. To the extent that Occasional Papers contain any errors or omissions, they should be attributed to the individual authors, rather than to the FCA.

Authors

Paul Adams, Stefan Hunt (Behavioural Economics and Data Science Unit, FCA),

Christopher Palmer (Haas School of Business, University of California Berkeley) and

Redis Zaliauskas (Chief Economist's Department, FCA).

Acknowledgements

We thank David Laibson, Brigitte Madrian, and Adair Morse for helpful discussions, Margarita Alvarez-Echandi and Sam Hughes for excellent research assistance, Michael Grubb and Peter Lukacs for detailed feedback, and Matthew Ward, Tim Burrell and other FCA colleagues who helped execute this research. The views expressed herein are the authors' and do not necessarily represent the Financial Conduct Authority.

All our publications are available to download from www.fca.org.uk. If you would like to receive this paper in an alternative format, please call 020 706 60790 or email publications_graphics @fca.org.uk or write to Editorial and Digital Department, Financial Conduct Authority, 25 The North Colonnade, Canary Wharf, London E14 5HS.

Contents

Summary

To inform possible future policy in the UK savings market, we test new consumer disclosure. Easy access savings accounts are the most popular and simplest way to save in the UK, with the main product feature being the interest rate. While significant rate differences exist on similar accounts both within and across providers, the majority of consumers rarely switch and so miss out on interest earnings.

The new disclosure proposals were designed to help consumers identify better products and stimulate competition between firms. We test their effectiveness using field trials involving five regulated firms and 130,000 consumers. Consumers in the trials were either about to experience a decrease in their interest rate, or were on a rate lower than available on currently offered products. We test three interventions: information about comparable higher-rate-paying products, a pre-filled return form that enabled simplified switching and a reminder about the rate decrease.

We find that front-page information about higher available rates led to an increase in switching from a baseline of 3% to 6% of consumers, while non-front-page disclosures had no effect. On a different sample of consumers, a pre-filled return form increased switching from a similar baseline of 3% to 12%. Reminders, especially those sent close to a rate decrease date, prompted an 8-9 percentage point increase in switching − comparable to the effects of the return form, albeit from a higher baseline level. All interventions increased switching within providers, but not to higher-paying products available from other firms. Despite switching within providers in the trials taking 15 minutes on average, according to a survey, and switching gains being non-trivial - £127 in the first year on average - we find that attention to disclosure is limited. This may explain the modest impact of most of the changes to disclosure trialled.

1 Overview

Purpose

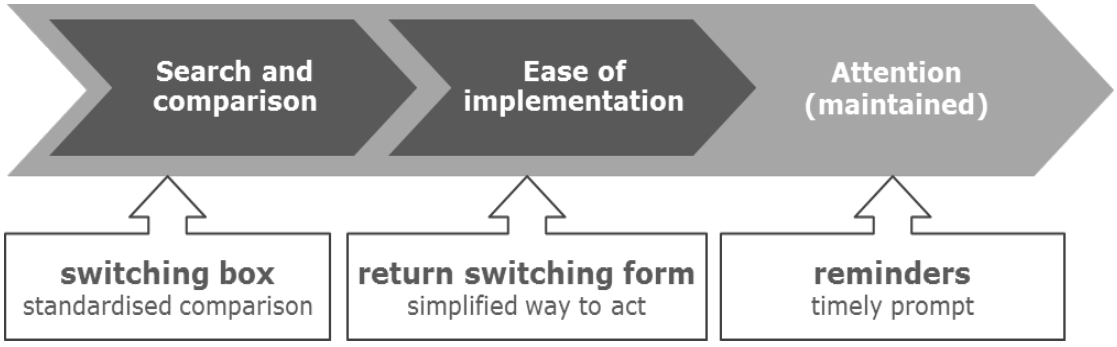
Cash savings accounts are the most popular form of household savings in the UK: 93% of consumers have a savings account amounting to total holdings of £700 billion (FCA, 2015). Instant access savings accounts, in particular, are among the simplest financial products - their key feature is the interest rate payable on the balance. Yet significant differences in interest rates persist on similar accounts within providers and across the market. Many providers offer higher interest rates on a visible set of accounts (front book) while reducing the rates on legacy accounts (back book). In principle, higher front-book rates may persuade consumers, especially those on the 'back-book' rates, to switch. But in practice this is not widespread — most consumers seldom switch their savings accounts and miss out on higher interest earnings.

While the effort involved in switching may explain why consumers with small savings balances do not switch, many consumers who hold substantial balances in low rate-paying accounts do not switch either (FCA, 2015). The FCA's review of the UK cash savings market identified several causes for this behaviour: consumers pay little attention to their interest rates, do not search for and compare their accounts to higher paying accounts, and even when they know there are higher paying accounts, they fail to switch. The FCA concluded that, among other things, providers could improve their communications with their customers to help them make better informed decisions, and proposed several remedies, including better disclosure.

Disclosure of information plays a key part in consumer decision making and has been one of the most popular types of regulatory intervention in retail financial markets across the world. Therefore, it is important to understand how to design disclosure well and when it should be used. For example, disclosure about financial products can help consumers by simplifying search and comparison, reducing obstacles to act, and raising and maintaining consumer attention to the relevant tasks. Owing to a variety of practical and methodological challenges, little is known about how the delivery of information actually affects consumer behaviour, even in simple choice environments, such as cash savings.

To inform the FCA's policy development, we tested the importance of disclosure design in protecting consumers and improving competition. We used data from five randomised controlled trials (RCT) with over 130,000 savings account holders, who had an opportunity highlighted to them to switch to an equivalent but better paying product, in some cases when the interest rate on their savings was decreasing. Working with five UK providers, we tested potential regulatory interventions in three areas: search and comparison, ease of implementation, and attention to the task (Figure 1).

Figure 1: Factors influencing switching and measures aiming to make them easier



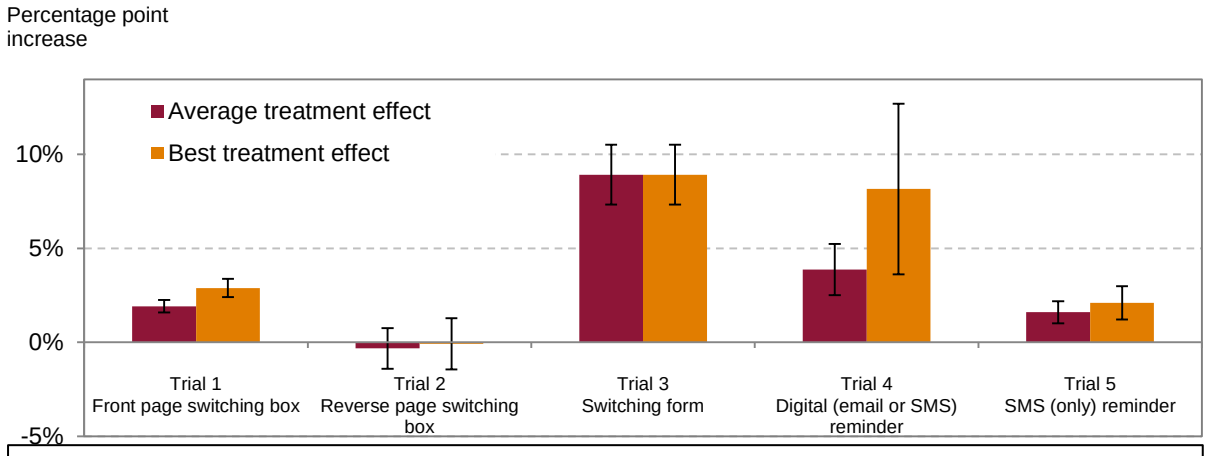
In the trials, consumers received varying amounts of information about a better product available to them and an opportunity to switch to it quickly using a simplified procedure. In Trial 1 and Trial 2 we tested a *switching box* on the front page and the reverse page of a letter, respectively. In Trial 3 we tested a *return switching form* in addition to a switching box. In Trial 4 and Trial 5 we tested email and SMS *reminders* about a rate decrease. The random assignment of customers into treatment and control groups that were on average identical enables us to attribute any observed differences in behaviour across the groups to the different interventions.

If our interventions make consumers significantly more likely to switch to a better savings account, this suggests that costly information, switching, or attention are among the causes of low switching. However, if having information on opportunities to increase interest income or a significantly less costly way to switch does not significantly affect consumer behaviour, this points towards other frictions limiting the usefulness of disclosure, such as effort, cost of switching, or sub-optimal design.

Key findings

Among the interventions, a simple pre-filled return switching form (Trial 3) and well-timed reminders (Trial 4) led to the highest absolute increases in switching of up to 9 percentage points (Figure 2). The return switching form increased switching from a baseline of 3% to 12%. Prominent disclosures—in particular front page information on better available products (Trial 1)—had marginal positive effects, raising switching from 3% to 6%, while non-front page disclosures showed no effect (Trial 2). We also show suggestive evidence that reminders were more effective when sent shortly before the rate decrease, compared to other timing (Trial 4), consistent with previous research. As shown in Figure 2, the switching level in the control groups differed significantly across trials in line with different product contexts and customer samples. The control groups received standard treatments from their banks that differed across trials.

Figure 2: Average and best treatment effects on account switching across the five trials



Overall, around half of the people switching in the trials chose to switch to a comparable higher-paying account with their current provider, while the remainder chose different accounts or different providers. The treatments in all trials increased switching within the current provider without stimulating switching to higher rate-paying alternatives on the market. This suggests that multiple factors influence consumer choice of provider.

Despite switching taking only 15 minutes on average, as reported by respondents of the follow-up survey, the switching level is low (17% across all trials) - even among consumers given relevant information about more attractive interest rates.

One explanation is that the amounts of money at stake for many savers were too low to justify switching: for half of the consumers across all trials the amount of additional annual interest income from switching is less than £32. We find some evidence for this explanation (eg, switching is higher among savers with higher balances, who benefit more from switching, and among retired depositors, who may be able to dedicate more time to switching). But, switching varies to a limited extent with the level of additional interest income and many consumers in our sample with high amounts of money at stake still do not switch.

2 Research context

The FCA conducted a review of the UK cash savings market, publishing a final report in January 2015 (FCA 2015).[1] The study found that a large proportion of savers in the UK hold substantial savings balances in low interest rate-paying accounts and rarely switch. It also identified causes that likely exacerbate this behaviour: consumers have low awareness of their interest rates, do not search for and compare their accounts with higher paying accounts, and do not move their savings to accounts that offer higher returns, even on substantial balances.

The FCA concluded that, among other things, providers could improve their post-sale communications with customers to help them make better informed decisions and proposed testing a number of potential regulatory interventions. We discuss the tested interventions as related to (i) search and comparison; (ii) ease of implementation; (iii) and attention.[2] See Annex 1 for a review of previous research.

Search and comparison

Consumers decide to search when they hope to find a suitable product offering better value.[3] When a consumer already has a product, the decision to search is driven by the expected return to search, which is the expected benefit of switching to a better value alternative net of cost, conditional on searching. The expected benefit prior to search is in practice often based on limited or noisy information, because information about better products can be costly to acquire: it is often dispersed across different sources and can change rapidly over time, even if price comparison websites mitigate this. Further, consumers may underestimate the benefits from switching by underestimating the probability that there may be a better deal by other providers. In these circumstances, measures that reduce search costs and the downward bias in perceived expected benefit from changing to a better value alternative have the potential to increase switching.

The FCA proposed a measure that would provide an up-to-date aggregation of best market deals in an accessible and prominent way to consumers, to help them identify and switch to better products. The measure, called a *switching box,* consisted of mandatory disclosure of better alternative products by providers to their customers. The switching box was proposed to be included in typical communications, such as annual statements of transactions and rate change notification letters. A standardised switching box would help compare their account to equivalent alternative accounts and outline the monetary benefits of searching for and moving their balance to a better account.

Ease of implementation

[1] Several changes to the tax rules affecting savings accounts have been introduced in the UK since early 2015, potentially reducing the attractiveness of ISAs relative to non-ISA interest-bearing accounts for customers with modest annual interest income. The rise in after-tax interest income up to the annual allowance threshold affects proportionally all accounts we examine in this research, since we do not examine switching between ISA and non-ISA products. From a historical perspective, base interest rates and interest payments on savings accounts remain low at this point of time.

[2] We do not specifically discuss the overall lack of consumer attention to information about financial products, but note that prominent disclosure of relevant information or simpler ways to act upon it may help increase consumer engagement.

[3] We omit the discussion of the process of comparing products (Grubb, 2015) because instant access savings accounts are among the simplest financial products and their pricing is almost entirely one-dimensional, determined by the interest rate payable.

When consumers find an alternative product that they expect to be better than their current product and decide to switch, they need to follow through on their intention to reap the benefit of their search effort. Switching itself can be costly and involve a number of steps that are not necessarily known to a consumer upfront. Those steps may include filling out paperwork, looking up and sending information, and activating their account. Having to go through a multiple stage process over time requires cognitive effort to keep track of the next steps. The more opaque the amount of time and effort needed are upfront, the less likely consumers will be to commit to and follow through on their intentions. Evidence on procrastination (DellaVigna, 2009) and ambiguity aversion (Fox and Tversky, 1995) is consistent with people typically avoiding tasks that require an unknown amount of effort. This will apply in particular to consumers who do not make financial decisions very often, such as customers who have held a product for a long time. Measures that make the switching process easier and more transparent would reduce the ambiguity, thus increasing switching.

The FCA proposed a measure that would simplify the switching procedure by removing multiple stages of the administrative process. The measure included an introduction of a tear-off return form attached to a letter from a provider about better alternative rates. The *return switching form* was to be pre-filled with all available customer details and would enable the customer to switch to a higher rate account with their current provider by signing and returning the form in a pre-paid envelope.

Attention

Focusing and maintaining one's attention to a task over time is costly. Consumers forego substantial benefits by being inattentive to cheaper available alternative products in some markets (Sitzia, Zheng and Zizzo, 2015). In the context of switching, consumers may search for products, decide to take action and to execute it at an appropriate point of time later. In reality, a number of events may occur between deciding to switch and the planned time window to do it. As a result, information overload (Schwartz, 2004), the cognitive cost of keeping track (Haushofer, 2015), and limitations to prospective memory (Ericson, 2011) can contribute to failure to act. In a situation like this, a prominent and timely prompt bringing the intended action back to the top of mind can help complete the task (Karlan et al, 2016). To tackle procrastination, real or nominal deadlines have been shown to be effective (Tu and Soman, 2014; Adams et al, 2015a), suggesting that the timing of the reminder may be important. As a result, the FCA proposed introducing *reminders* to customers when rates on their savings were decreasing. Reminders would follow an already mandatory communication from their provider.

The steps of switching to a better product and interventions aiming to make those steps easier are summarised in Figure 1.

3 Research design

Experimental setting

To examine empirically the importance of each of these interventions, the FCA, with help from five UK deposit-taking institutions, tested them in a range of natural field trials. Each financial institution helped to complete one trial. In total, five trials were completed (Table 1).

Table 1: Overview of trials

Trial	Treatment details	Rate change	Customer relationship
Search and comparison			
1 Front page switching box	Different degree of information on the front page of an annual statement	none	long tenures
2 Reverse page switching box	Different degree of information on the reverse of a rate change letter	yes, sixty days after treatment to all customers	long and short tenures
Ease of implementation			
3 Return switching form	Letter tear-off pre-filled for a switch to a higher rate-paying account	none	long tenures
Attention			
4 Digital reminder	Rate decrease reminder via email or SMS	yes, end of individual bonus period seven weeks before to eight weeks after treatment	short tenures
5 SMS reminder	Rate decrease reminder via SMS	yes, one week before to one week after treatment to all customers	long and short tenures

Note: for the purpose of this research, we define customer relationship as “long” if it is longer than 10 years and as “short” if it is shorter than 2 years. The indications in the table are only approximate and reflect the distribution of account age in each trial sample.

All trials were conducted with customers who held an easy-access savings account with one of the partnering UK financial institutions at the time of selection for the trial. Customers were experiencing a rate decrease in three trials (Trial 1, 4 and 5) and were already on a relatively low rate in two trials (Trial 1 and 3).

Customers in the reverse page switching box trial (2) and in the reminder trials (4 and 5) faced an interest rate decrease to a level that was significantly below the average of what new customers could obtain. In these trials the firms sent letters to customers informing them of the old and new interest rates and some general contact details for further information no later than 60 days before the interest

rate decrease, in accordance with EU regulatory requirements.[4] In the reverse page switching box and the SMS reminder trials the rate decrease applied to all customers holding the particular type of the account and occurred on the same actual date. In the digital reminder trial the rate decrease occurred a fixed period of time since the individual account opening date and was part of the account terms and conditions.

Customers in the front page switching box (1) and the switching form trials (3) faced no interest rate decrease but had already been receiving an interest rate that was significantly below market average of what new customers could obtain. These customers received no other specific communication in advance of the information sent out during the trial.

We oversampled consumers with large balances in all trials relative to the market to ensure sufficient power to detect switching behaviour among consumers with ample financial motivation to do so. However, we included customers with lower balances in order to understand the applicability of our findings to those customers.

Below we describe each trial individually. Examples of each treatment are included in Annex 2.

(1) Front page switching box trial

In this trial we tested a switching box on the front page of an annual statement sent in autumn 2015. Customers were randomly divided into five equally sized groups.

The control group received an annual statement with no additional information on the front page. For treatment groups, different information was added to the front page of the annual statement. This included a simple encouragement to shop around for another account; a comparison of the currently applicable rate with the highest rate available on a comparable account with the current provider (*best internal rate*); *best internal rate* and in addition the average of three highest rates on comparable accounts with competitors (*best competitor rates*); and a final variant which added a graphical illustration of gains from switching. The monetary gains were based on an illustrative balance of £100, £1,000 or £10,000, depending on which was the next lowest to the customer's actual savings balance (for example, for an actual balance of £650 the illustration was £100). We excluded customers with balances lower than £100.

(2) Reverse page switching box trial

In this trial we tested a switching box on the reverse of the rate change letter. Customers were randomly divided into five equally sized groups. The control group received a letter which notified the customer of the rate decrease on all affected instant access accounts early summer of 2015. All letters were sent more than two months ahead of the rate decrease.

The control letter included no switching box on the reverse side. The treatments added a reverse page switching box that included either the *best internal rate* only, or both *best internal rate* and *best competitor rates*. Each of these two versions either had an illustration of monetary gains from switching based on an assumed balance of £5,000, or was personalised to the individual balance. All treatment versions included graphical comparisons of the rates in form of bar charts. Customers who had opted out of marketing communications were excluded from this trial.

(3) Return switching form trial

In this trial we tested including a tear off slip in a letter. In August 2015, the provider sent a one-off communication to encourage long-standing customers of a legacy account to switch to an equivalent account with a significantly higher rate. The customers were divided into two equally sized groups. The control group received a letter with a switching box that included the *best internal rate* and the

[4] Including Payment Services Regulations 2009 Regulation 42 and Banking Conduct of Business Sourcebook (BCOBS) rule 4.1.

best competitor rate, as well as potential gains from switching based on a non-personalised balance example (£5,000). The treatment group received the same letter, but with a tear-off return switching form pre-filled for a switch to the best internal rate, along with a prepaid envelope.

(4) Digital (email or SMS) reminder trial

In the digital reminder trial we tested email or SMS reminders sent to consumers who held accounts that experienced scheduled rate decreases during June-September 2015. Customers were randomly divided into three equally sized groups. The control group received only an initial letter sent at least 60 days before the rate decrease, as mandated by the current regulation. Treatment groups in addition received a reminder closer to or after the date of their individual rate change: one group received an email reminder, and another group received an SMS reminder. The email reminder was similar in its content to the letter sent to all groups. It included information about the previous and new interest rates, and in addition to the initial letter it included the best interest rate available on a comparable account with the firm. The SMS reminder was shorter and included no information on interest rates. The trial sample consisted only of customers who all had an email address and a mobile phone number on record.[5] Across the sample, 75% of the customers had balances of more than £4,000, and the remaining 25% had balances of between £1,000 and £4,000.

(5) SMS reminder trial

In the SMS reminder trial we tested an SMS reminder around a rate decrease that happened in early summer 2015. Customers were randomly divided into five groups. The control group received no further communication following the initial letter sent 60 days or more before the rate decrease. Customers in the treatment groups received an SMS reminding them of the rate change, either one week before or after the rate decrease, or on the day of rate change (with framing either encouraging switching, or saying that there was no higher rate on a comparable product available). Each treatment group included 16% of the trial sample and the control group included the remaining 35% of the sample. All customers in the trial had a mobile phone number on record.[6] In the sample, 60% of customers held balances of more than £5,000 and 40% held balances between £1 and £5,000. Customers who switched between assignment and the due date of the reminder still received the reminders and were retained in the sample to ensure that the comparison of effects of timing is consistent across all treatment groups.

Outcome measures

As in previous research, we define customer actions as switching when customers converted, closed or emptied their savings account (Adams et al, 2015). We consider an account emptied if 95% or more of the balance recorded at the start of the trial is withdrawn from the account. Where customers either converted their account, or opened a new comparable savings account with the same firm and moved some money into it, we defined this sub-set of switching as Internal switching. We define all remaining switching that does not fall into Internal switching as Other switching.

The distinction between Internal, Other and Non-switchers is helpful, because we observed the interest rate only when customers switched internally (Internal switchers), or if they did not switch (Non-switchers). We did not observe the interest rate for customers who switched to a different type of account (such as tax-free savings) or who moved to a different provider (Other switchers). Therefore, in our data, we could not separate the outcomes for Other switchers. Potential outcomes include

[5] 90% of customers in the sample had both email and phone number on record. The partnering institution evaluated that around 2% of email reminders and around 10% of SMS reminders could not be delivered due to invalid records. We do not adjust trial results for failed deliveries.

[6] The partnering institution evaluated that around 8% of reminders were not delivered to customers in the treatment groups due to invalid phone number records. We do not adjust trial results for failed deliveries.

transferring the balance to an account outside the firm or a different account with the firm (but not the specific comparable account), or withdrawing the money and spending it or investing elsewhere. We assume that these customers probably obtained a better interest rate or a more suitable product, because they typically would have had access to a wide range of options in the market. However, we do not know their exact outcome.

Where our measures overlap, we record the latest action as the final action. For example, customers who closed their account after converting it would be classified as Other switchers. Internal switching and Other switching are mutually exclusive and always sum up to All switching (Table 2).

Table 2: Universe of mutually exclusive outcomes of switching

<table>
<tr><th></th><th>Closed old account</th><th colspan="2">Old account still open</th></tr>
<tr><td></td><td></td><td>Emptied >95%</td><td>Did not empty</td></tr>
<tr><td>Opened new internal account</td><td colspan="2">Internal switchers</td><td rowspan="2">Non-switchers</td></tr>
<tr><td>Did not open new internal account</td><td colspan="2">Other switchers</td></tr>
</table>

Predicted effects of the interventions

The propensity to switch absent interventions and in response to them will be affected by both rational factors and limitations to perfect rationality. To structure our analysis and findings, we made the following predictions:

Prediction 1: *The switching box with best internal rates only will raise Internal switching and may or may not affect Other switching, and the switching box with best internal and best competitor rates will raise both Internal and Other switching.* If customers prefer higher rates on their savings to lower rates but some of them are not aware of their existence or find it cognitively costly to acquire this information, disclosure of alternative better rates can be expected to increase switching, subject to costs of switching.

Prediction 2: *The return switching form will increase Internal switching and may or may not affect Other switching.* The return switching form is a measure aimed at reducing the cost of switching to a better internal account, for customers who wish to do so; therefore it is likely to increase Internal switching. To the extent that the switching form is also reducing the cost of Internal switching relatively to the cost of Other switching, it may have an effect on Other switching.

Prediction 3: *Reminders will increase Internal and Other switching.* If some customers fail to pay attention to a rate decrease, reminders may act as prompts and lead to more switching to the type of account preferred by the customer.

Prediction 4: *All interventions will increase switching more by customers with higher monetary gains.* The expected gains are measured as extra future interest earned in monetary terms, therefore customers with higher balance and/or a larger difference between current and possible interest rate can be expected to switch more often, other things equal.

Prediction 5: *All interventions will increase switching more by customers in retirement.* The costs are a cognitive cost of identifying and taking the necessary steps to switch, and an opportunity cost of time. The opportunity cost of time comprises of a one-off search and switching cost and, possibly, an ongoing convenience cost of being with a different provider (Farrell and Klemperer, 2007). Older customers, of whom many are in retirement, have a lower opportunity cost of time and more experience with financial matters. However, elderly customers may have a have a higher cognitive cost (Agarwal et al, 2009), which predicts a decline in switching among that group of customers relative to younger customers.

Prediction 6: *The interventions will increase switching more by customers who have held their accounts for a shorter period of time.* Customers with older accounts tend to show high brand loyalty or high cognitive costs and hence are less likely to switch.

Data and balance tests

The detailed descriptive statistics of each trial are shown in Table 4 in Annex 3. The sample size of each trial varied depending on the number of treatments tested and the available customer base. The length of the observation period also varied due to practical constraints. We collected data on basic customer demographic characteristics and their financial product holdings with the partnering institution.[7] We find that the variation of customer age and gender across the trials is relatively low, while average savings balance, proportion of customers who have their current account with the same bank, and average account age varied more widely, in line with our sample selection procedure as summarised in Table 1.

As shown in Table 5 in Annex 3, the means of key demographic statistics in control and treatment groups are well balanced and cause no concern about systematic selection bias in the assignment of customers into trial groups. In some instances, equality of means of age, balance and gender are rejected individually at 5% significance level, although the differences in means do not seem material. The partnering institutions which conducted the trials stratified the trial groups across somewhat different subsets of key demographic and financial variables, explaining the differences in average values across groups observed in some variables. The joint tests do not reject at 5% significance level that the means of the key customer demographic variables were equally distributed across all trial groups.

[7] We do not have data on education, employment and financial products the customers held with other providers.

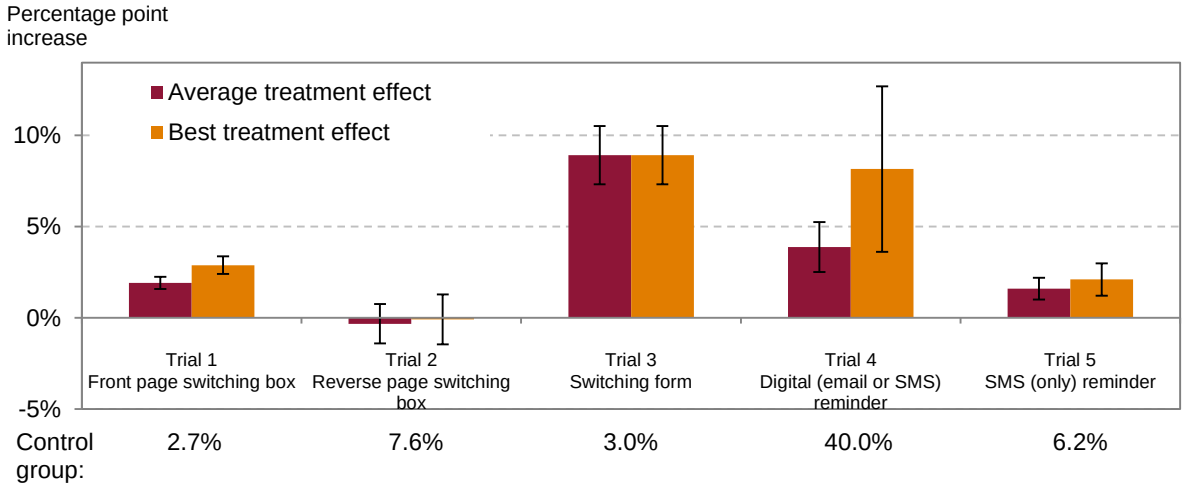
4 Results

Summary

We find that best-performing interventions increased switching to a higher-rate paying account by 8-9 percentage points. In the case of the return switching form (Trial 3), this corresponds to an increase from a baseline of 3.0% to 11.7%. Indicative evidence suggests that optimal timing increased the effect of the reminder compared to the average reminder effect in the trial – from 4.7% to 8.2% (Trial 4). The effect of information about better alternative rates depended on its prominence. In the front page switching box trial (Trial 1), the information treatments had a marginal positive but statistically significant effect, increasing switching from 2.7% to 5.6%. None of the variants of the switching box included on the reverse of the rate change letter (Trial 2) had any significant effect on switching.

For an easy overview we present the best and average treatment effects of each trial together in Figure 3 four weeks after each treatment date or rate decrease.[8] We subsequently discuss the potential impacts of different trial contexts and consumer samples on our results. For the switching box and return switching form trials we present the results at four weeks after sending the communication. For reminder trials, we present the results four weeks after the rate decrease date, because the timing of communication was varied around the rate decrease date.[9]

Figure 3: Average and best treatment effects on switching across the five trials



Controls for gender, and quadratic terms of customer age and potential interest gains. Switching boxes and tear-off return switching form 4 weeks after letter was sent; reminders 4 weeks after rate decrease.

In line with the different contexts and consumer samples used for each separate trial, the control group switching level varies. It is lowest, at 3%, in the front page switching box and the switching form

[8] OLS regression results of average and best treatment effects are presented in Table 6 in Annex 3. We also run Logit regressions to show that the measured effects are comparable (Table 14 in the Technical appendix).

[9] For the reverse page switching box trial we also had data on switching 5 weeks after rate decrease (16 weeks after the letter) and found that the treatment effects are the same, while the switching level in the control group kept rising gradually. This is consistent with treatment effects materializing soon after they are administered. We present results using latest possible data for each trial in Tables 1-10 in the Technical appendix.

trials, where customers were long-standing and experienced no rate change. In the two trials where a rate decrease was happening – the reverse page switching box trial and the SMS reminder trial - the control group switching is in the range of 6-8%, consistent with more customers reacting to a rate decrease. The control group switching is highest in the digital reminder trial. As shown in Table 1, the digital reminder trial was conducted with predominantly high-balance customers of an account that was experiencing the end of a scheduled bonus period, hence included a lot of rate sensitive customers.

Overall, we do not find that the effect sizes are solely driven by differences in the customer base of the trials. Customers in trials where no rate change occurred and where the accounts were held for a long time would be expected to react least to the interventions. However, we find that this was not the case for the switching form – it generated the largest absolute increase in switching, even on arguably the least responsive customer base of all five trials, whereas the front page switching box was less effective on a similar customer base. By contrast, the effect size in the digital reminder trial was comparable to the effect in the return switching form, but had a much higher baseline switching.

We expect that our interventions would have lower effects on the whole UK market on average, because for the trials we oversampled customers with higher gains from switching, compared to the market average. The average easy-access savings balance in the market is substantially lower (£4,900, FCA 2015, p.17) compared to the trial sample (£17,100)

When do consumers switch?

Based on comparison of switching levels of control and treatment groups over time, the largest proportion of consumers who take action in the control group do so either around a prominent event such as a rate decrease, or soon after they receive a communication.

We illustrate this finding, consistent across all trials, with two examples. Where a treatment was a letter or a reminder related to a rate change, customers who switch in response to it do so within the first few weeks after the communications were sent (Figure 4, reminders sent eight weeks before to seven weeks after the rate decrease). Similarly, most customers who switch in response to a communication unrelated to a rate change, do so within the first few weeks after receiving it (Figure 5). Overall, these results are consistent with consumers responding to one-off prompts by acting 'now or never'.

Figure 4: Digital reminder trial

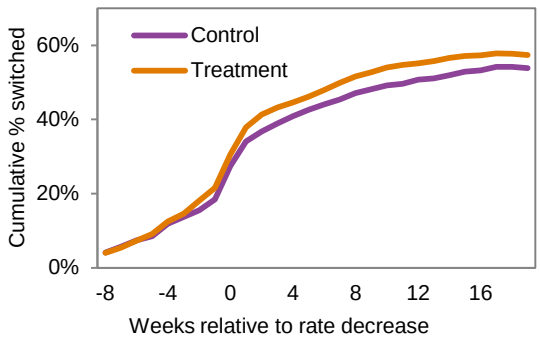
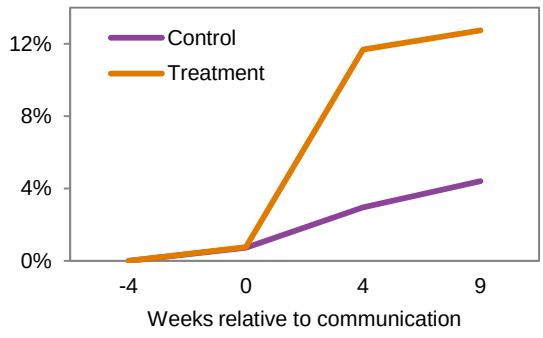


Figure 5: Switching form trial



Where do consumers switch to?

Across all trials, the switching level in the control group was 10.1%[10], of which 4.6% was Internal switching and 5.5% was Other switching. The proportion of Internal and Other switching differed across all trials (Table 7). The treatments in all trials led to more Internal switching and had a very

[10] A simple non-weighted mean across all trials.

small effect on Other switching, which suggests that external switching costs or convenience costs, as well as brand preferences and reputation of providers, among other factors, could be important. While Other switching was the more popular choice in the control groups in the front page switching box and the switching form trials, our treatments led to an over 100% increase in Internal switching, which meant that Internal switching became the more popular type of switching in the treatment groups.

To understand consumer choices of accounts, it is useful to consider the relative attractiveness of Internal and Other switching given the rate differentials and the potential costs involved in switching. In all trials, the interest rate customers would receive if they took no action following the trial treatments was no higher than 0.5% per year. Within each provider, the difference between the applicable rate and the highest available internal rate ranged from 0.2% to 0.9%. In all trials except the reverse page switching box trial the terms and conditions of the best comparable internal account were identical or better compared to the currently held account, as summarised in Table 3. In the reverse page switching box trial, the best internal account had a more restricted access, possibly making it less attractive for customers with preference for branch or phone access (57% of customers used online or mobile banking in the three months prior to the trial communication). Finally, in both switching box trials and the digital reminder trial the interest rate on the best internal accounts included a 12 months introductory bonus. While the benefits in terms of extra interest earned would have been temporary, the rate after the bonus expiry would have been no lower than the rate payable on the currently held account.

Table 3: Comparability of the best internal account to the currently held savings account

Trial	Currently held instant access account	Best internal instant access account	Intro bonus
1 Front page switching box	online, phone and branch	online, phone and branch	yes
2 Reverse page switching box	online, phone and branch	online only	yes
3 Switching form	post only	phone, post or branch access[11]	no
4 Digital (email and SMS) reminder	online, phone and branch	online, phone and branch	yes
5 SMS reminder	online only	-	-

The best competitor rates were comparable for all trials and ranged between 1.08-1.35% and the incremental gain from Other switching compared to Internal switching ranged from 0.1 to 0.6 percentage points.[12] However, the incremental cost of Other switching could have been substantially higher than the cost of Internal switching. Switching to another provider would involve (1) search and evaluation of alternative brands and product features, (2) fixed cost of transition to a new provider, (3) ongoing convenience cost of monitoring the account and/or having different level of service, such as the presence of a network of branches, and (4) operational cost of time to open the account and transfer the funds. In contrast, Internal switching would involve (4) and almost none of (1)-(3).

Based on costs and benefits, Internal switching may have been the more attractive option for most customers, even with sizeable gains to make.

[11] To obtain online access, for security reasons customers needed to contact the provider in addition to or instead of sending the switching form. Other account features, including the interest rate, did not differ.

[12] The best competitor rates to be included in the switching boxes were agreed in bilateral discussions between the partnering institutions and the researchers, based on comparability of main terms and conditions. The variation resulted from the timing of the trials differing by a few months, during which competitors introduced and withdrew some products.

Search and comparison: switching box

The effects of the switching box depended on the prominence of information. None of the variants of the switching box included on the reverse of the rate change letter (Trial 2) had any significant effect on switching. The survey conducted with trial participants after the trial revealed, among other things, that 39% of customers did not recall receiving the letter about the imminent rate decrease. Of those who recall the letter, only one in four reported to have read more than just the front page. Many customers (34%) could not recall the interest rate they were receiving even approximately (+/-0.5%), and 62% were not aware that their provider offered a substantially higher rate on a comparable savings product. Overall, this suggests that information on the reverse of the letter was very unlikely to be noticed and acted upon by consumers. We do not further analyse the results of the reverse page switching box trial, because the treatments had no effects, and instead turn to the front page switching box.

Details of the front page switching box

In the front page switching box trial we tested how incremental changes to information on better available accounts on the front page of an annual statement affected switching. The trial comprised of a control group and four treatment groups. The treatments added information to the front page of the annual statement:

(1) Call to action (encouragement to shop around, no rate comparisons)
(2) Best internal rate
(3) Best internal and best competitor rate
(4) Best internal, best competitor rate and a graph

(2), (3) and (4) included an illustration of potential gains per year in monetary terms from switching the account to a higher rate. (4) built on (3) and added a graphic that visually compared the current rate, the best internal rate, and the best competitor rate (see Annex 2 for an example).

While the best internal rate included a fixed 12- month bonus, its terms and conditions were no worse than those of the account customers currently held. The cost of switching internally was very low, especially for customers with access to online or mobile banking.

The terms and conditions of the highest paying comparable account in the market were similar to the account in the trial. The firms offering them were authorised businesses in the UK and covered by the Financial Services Compensation Scheme, but in most cases they had fewer branches and were lesser known brands. The switching box variants that included competitor rates only stated the average rate in the main text and identified the price comparison tool from which the rates were drawn in the footnote, but did not name the providers whose rates were used.

Findings of the front page switching box trial

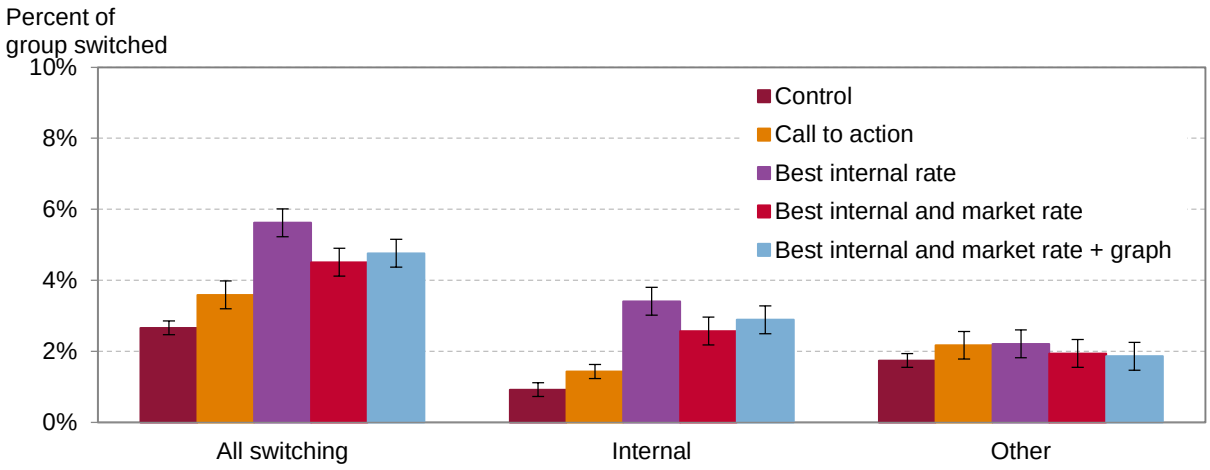
Prediction 1: The switching box with best internal rates only will raise Internal switching and may or may not affect Other switching, and the switching box with best internal and best competitor rates will raise both Internal and Other switching.

Prediction 1 is partially supported by the findings. In the front page switching box trial, the information treatments had a marginal but statistically significant effect on switching. All variants of the switching box increased Internal switching, but had no effect on Other switching.

We compared how the different treatments affected switching of accounts relative to the control group (Figure 6). While all treatments increased the share of accounts switched by 4.7-5.7% from a level of 2.7% in the control group, the 'Best internal rate only' variant was most effective and was more effective than a generic call to action or presenting both - best internal rate and best competitor rate. While gains from switching were comparable to those in the reverse page switching box trial (which

had no effect), the prominence of information on the front page of the annual statement most likely led to more people noticing it.

Figure 6: Effects of the front page switching box trial, four weeks after annual statement



Adding information about competitor rates compared to best internal rate only reduced switching, and especially Internal switching. There could be a number of reasons for this finding which we do not investigate in this research, including choice overload, failure to implement, customer's desire to either switch to the best attainable rate or, if too difficult, not at all, and, finally, the lack of habituation of consumers to novel disclosure.

Our results on Internal vs. External switching suggest another way through which disclosures of competitor prices can backfire. A consistent finding is that consumers appear reluctant to switch to an external provider, preferring instead to keep their current provider and switch savings-account products. This may be because of other complementary services provided by the institution (eg, other products) or because the banks offering higher rates were less well known. If consumers use name-recognition as a proxy for bank reputation, then highlighting competing higher interest rates from less well-known banks may serve to reinforce a consumer's decision to stay with their current provider, regardless of its interest rate. Similarly, providing information on a competitor's prices may be too unusual compared to the established practice for consumers to understand or trust it, if implemented without appropriate disclaimers and public awareness measures.

Ease of implementation: switching form

Prediction 2: The switching form will increase Internal switching and may or may not affect Other switching.

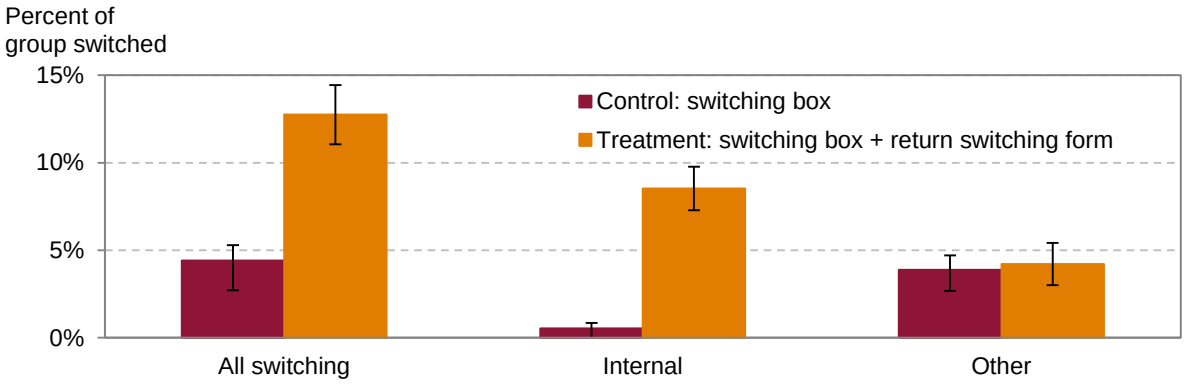
Prediction 2 is supported by the findings: the return switching form increased switching compared to the control group. The increase in switching was mainly driven by more Internal switching (Figure 7). In the control group, 3.0% of customers switched within 9 weeks after the letter was sent, which was the latest point of data collection. Adding a return switching form increased switching by 8.8 percentage points.

In the control group most customers responded to the letter by switching to something other than the best comparable internal rate. Adding the return switching form neither increased nor reduced Other switching. This suggests that a simplification of Internal switching did not have a negative effect on consumers' willingness to consider a wider range of options.

The return switching form was the most effective treatment tested in all the trials, both in terms of absolute increase in switching and relative to the control group. This evidence points to the importance of measures that enable immediate response by consumers and help to overcome

procrastination or failure to act upon commitment. We argue that the switching form also reduced cognitive barriers to switching in two ways: it removed ambiguity about the time it takes to switch by revealing all the necessary steps, and it also removed the need to keep track of an action needed at a later stage, except for taking the envelope along to the post box. We also found that the switching form was more effective on customers who have held their accounts for a long time (>10 years).

Figure 7: Effects of the return switching form on switching, nine weeks after sending the letter



Attention: reminders

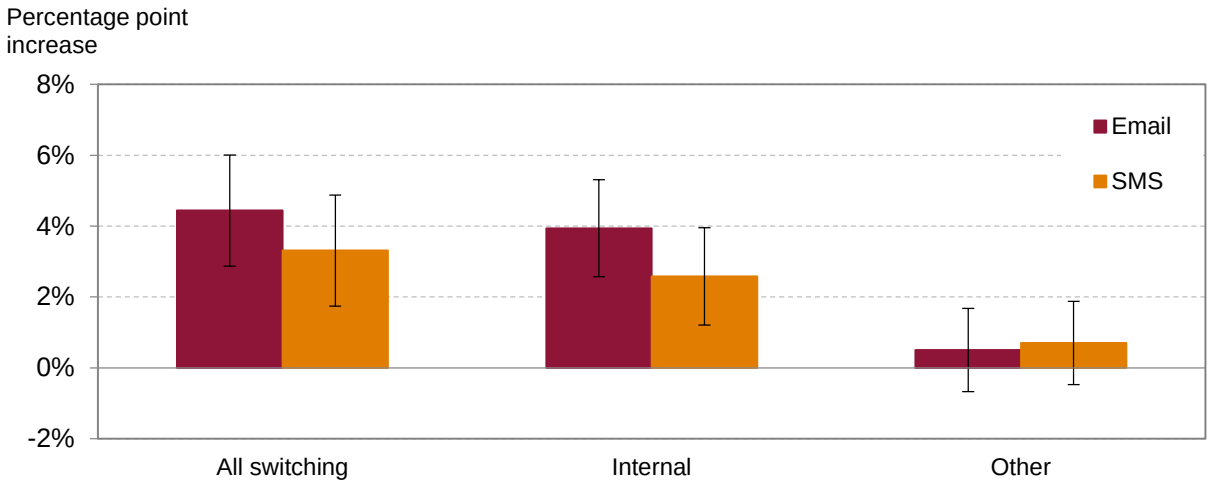
Medium of reminders

Prediction 3: Reminders will increase Internal and Other switching.

Prediction 3 is partially supported by the findings with reminders increasing Internal switching, but having almost no effect on Other switching (Figure 8). In the digital reminder trial the email reminders were consistently slightly more effective than SMS reminders.

Comparing the content of email and SMS reminders, one notable difference was that the email reminder included information about the best internal rate, while SMS reminders only contained a generic prompt to look for better options. Where customers did not act upon the reminder immediately, it is likely that email reminders are easier to store in a more prominent way (ie, in the inbox) than SMS reminders, and therefore can be seen and acted upon even some time after receipt. Both these causes may have made email reminders more effective, by making them more informative and easier to store.

Figure 8: Effects of digital reminders on switching, four weeks after rate decrease

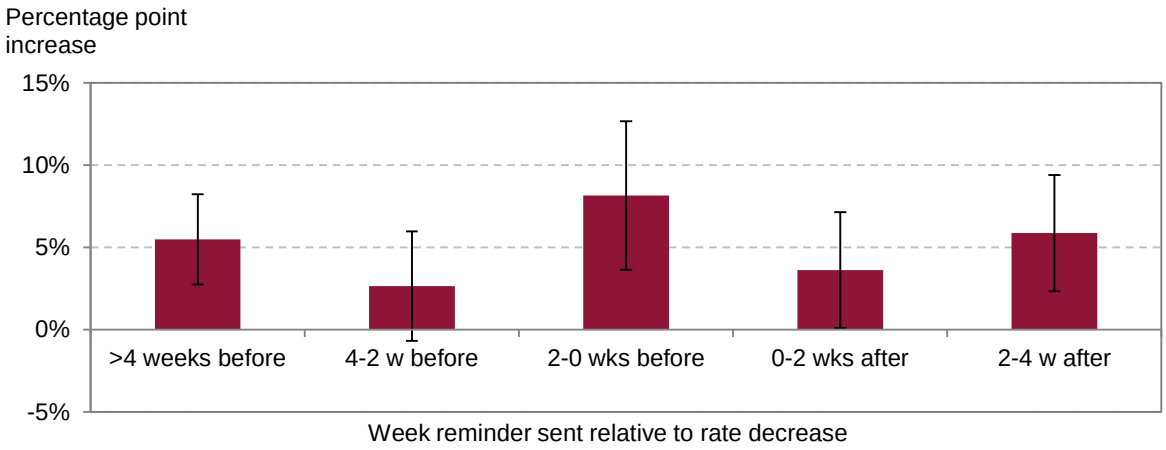


Timing of reminders

We tested the timing of reminders in two trials and present the regression results in Table 8 in Annex 3. We find that reminders had a positive and statistically significant effect, increasing switching by 1-8 percentage points relative to the control group. Reminders increased switching across a wide range of timings, but our results indicate that their proximity to the rate decrease date was important.

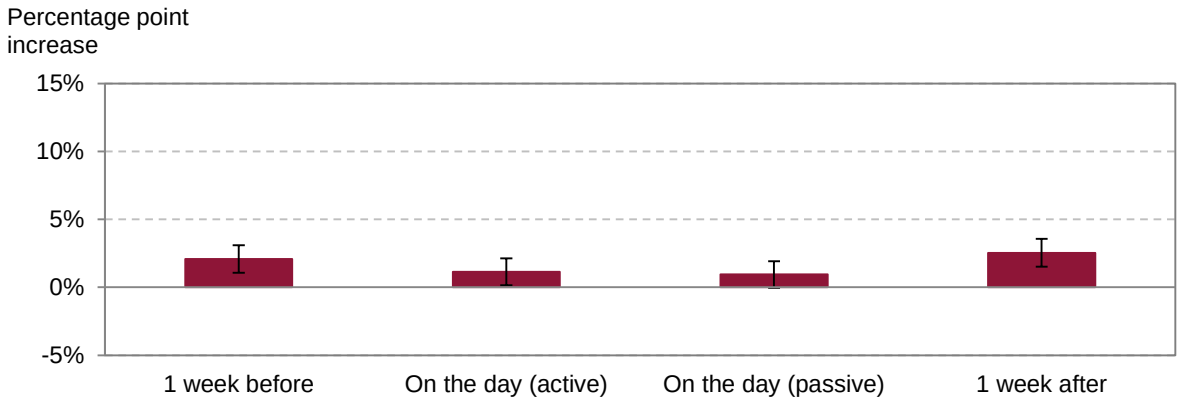
In the digital reminder trial, reminders sent within two weeks prior to expiry appear to have increased switching by most, but the effects of reminders do not statistically significantly differ across the fortnightly cohorts (Figure 9).[13] Effects of earlier or later reminders may be lower than of reminders sent closer to the rate decrease, though the differences are not significant. The timing of the reminders was not assigned randomly due to trial design limitations, and we discuss how we address this point at the end of this section.

Figure 9: Effects of digital (email or SMS) reminders on switching, four weeks after rate decrease



In the SMS reminder trial, reminders increased switching by 1.0-2.6 percentage points compared to 8.8% in the control group (Figure 10). The effects of SMS reminders do not significantly differ across the timings we tested (p value 0.18).

Figure 10: Effects of SMS reminders on switching, nine weeks after rate decrease



The effects of reminders were in absolute terms higher in the digital reminder trial (both of SMS and email reminders) than in the SMS reminder trial. However, we cannot directly compare the results of

[13] We cannot reject at 5 % level that reminder effects were the same across all fortnightly cohorts (p=0.32) or that the effect of reminders sent within two weeks prior to expiry was the same as of reminders sent at different times (p=0.14). Breaking the bi-weekly cohorts into weekly cohorts we show that, while the standard errors remain large, the coefficient sizes are highest in the two weeks prior to rate decrease (Table 4 in the Technical Appendix).

the two trials, because the context of the two reminder trials differed significantly. In the SMS reminder trial the rate was reduced for all customers of the account and no new higher paying account was introduced by the same provider. Given our overall findings that most switching, including in the digital reminder trial, was Internal, the absence of a better internal rate in the SMS reminder trial severely restricted the choice set for customers, including in how they could respond to reminders. Therefore the incentives to respond to the reminder were limited to the most rate-sensitive customers. As a result all switching in the SMS reminder trial was Other switching.[14] In the control group of the digital reminder trial, the rate drop was part of the initial terms and conditions and many customers were switching around the date of the rate expiry.

The evidence from the digital reminder trial is consistent with previous evidence that information provided at the most relevant time, ie in this case close to the rate increase, appears to be more effective (Adams et al, 2015b). Further, the effect is significantly higher when reminders are sent before the rate decrease date rather than after it.[15] This is somewhat puzzling from an economically rational point of view, because there was no change in customers' ability to switch their account at the date of rate expiry. Tu and Soman (2014) find, through a series of lab and field experiments, that task categorisation matters and consumers are more likely to take action, for example open a bank account or move funds, if it occurs before rather than after a prominent event.

Finally, a couple of notes on the analysis of the timing effects in the digital reminder trial are due. Customers had all opened the account with a 12-month bonus rate on varying dates during a 15-week period the previous year, so each had a different individual rate decrease date. Due to logistical constraints we sent the reminders on one actual date to all customers, as it was not possible to send reminders at different points of time. Therefore the timing of reminders relative to the individual rate decrease dates was not assigned randomly. Each customer account had an interest rate decrease date which was within eight weeks before and seven weeks after the date of sending the reminders.

We grouped the customers into 15 'cohorts', each representing a seven-day interval of rate decrease dates, then tracked the behaviour of each customer relative to their individual rate decrease date. Since each cohort had a different account opening date and therefore rate decrease date, they may differ in observed and unobserved ways. We found that the cohorts differed somewhat by age and balance, and the switching level in the control group steadily and slowly trended up for later rate decrease dates, increasing by 10 percentage points from the earliest to the latest rate decrease date. In the regression analysis we control for key demographic characteristics when assessing the effects of the trial. Given the trend in the control group switching level is steady and the week-by-week changes minor, it is unlikely to drive the relatively sharp differences in our timing results.

[14] In this trial we obtained more information about the types of Other switching than in other trials, including whether Other switching was internal to a different savings product, a non-savings product, or a withdrawal of funds from the bank. We find that much of Other switching does not consist of withdrawals from the provider, but goes to other types of products offered by the same provider. We also find that the higher effect of reminders before and after the rate decrease date was driven by more withdrawals, but the differences across treatment groups are jointly not significant (Table 13 in the Technical appendix).

[15] The effect of reminders immediately prior to expiry was driven by customers aged 60 years and above, alongside customers with modest but not lowest gains (£50-100). Possibly, older consumers were more likely to react when reminded close to decrease because they are more experienced in dealing with their finances or with inertia and were more able to use available commitment devices. Our analysis does not show that customers aged 60 years or more have lower switching levels in the control group compared to younger customers. See Table 15 in the Technical Appendix.

Customer demographics

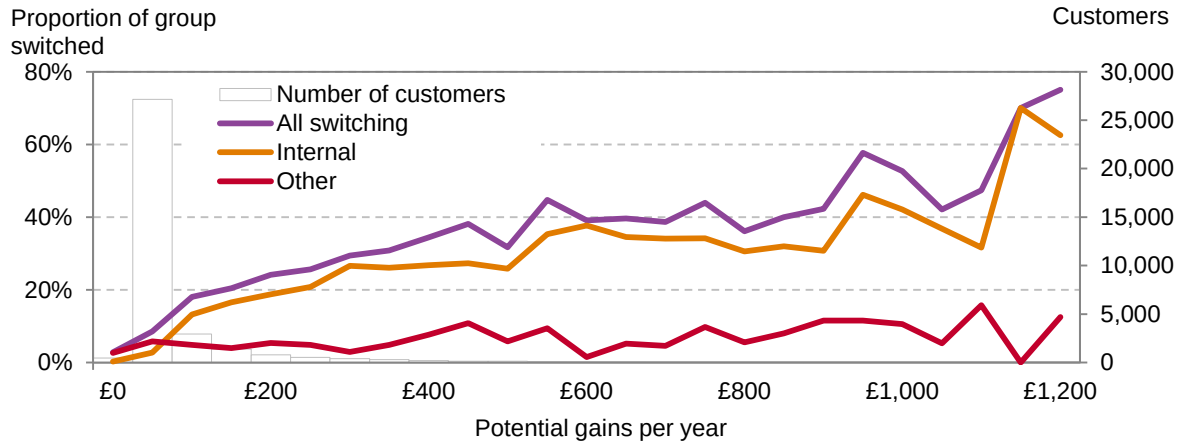
Potential monetary gain

Prediction 4: All interventions will increase switching more by customers with higher monetary gains.

Prediction 4 is partially supported by the findings: aggregated across all trials the switching level in the control groups is higher by consumers with higher monetary gains (Figure 11), but we only find weak evidence that the interventions affected customers with higher gains more than with lower gains.

Looking at the components of switching, while the relationship in the control group is strong for Internal switching, especially driven by the higher switching level in the digital reminder trial, there is no correlation between Other switching and potential gains across all trials. This suggests that Other switching, which is a mix of a number of possible actions, was driven more by other factors than by gains from extra interest earned. Although most coefficients are statistically not significant, treatments appear to have increased switching more when gains were higher, except in the SMS reminder trial, where treatments were most effective on the lowest gains group (Table 9).

Figure 11: Potential gains and switching in the control groups



We defined the gains from switching as the increase in interest accrued in one year if the customer switched their account. We approximated it with the difference between the better available rate and the current rate payable on customer's account multiplied by the account balance at the start of the trial. Where our treatments included information about higher rate-paying external accounts, we used these to estimate gains from external switching. In trials where treatments included no such information, we used the higher rate paying external accounts from other trials closest to the date.

We opt for external gains as representing the best market wide option consistently across all trials, and we also argue that the gains from external switching are a conservative measure: any internal switching we observed led to a lower monetary gain than the estimated external gain and hence to a lower revealed reservation price of switching. In a robustness test we show that results using gains from Internal switching are similar.[16]

In terms of the period of time used to calculate the gains from switching, most of the higher paying accounts had an introductory bonus which lasted 12 months, after which the interest rates decreased to a level comparable to but no lower than what the customers were earning on the accounts they currently held. Where the rate after bonus expiry remained higher than on the currently held account, customers would typically continue to benefit from the higher interest rate, because the erosion of interest rates on long-standing accounts is very gradual and typically takes significantly longer than 12

[16] See Tables 17-20 in the Technical appendix. Some differences in the Reminders regression results were caused by exclusion of the SMS reminder trial where Internal switching was not possible.

months (FCA, 2015, p. A3-13). Therefore we argue that 12 months as a measure of potential gains is conservative.

Finally, some customers in the trial sample may have intended to withdraw the funds within less than 12 months, reducing their expected benefits of switching. We acknowledge that for these customers the gains would have been lower than we calculated.[17]

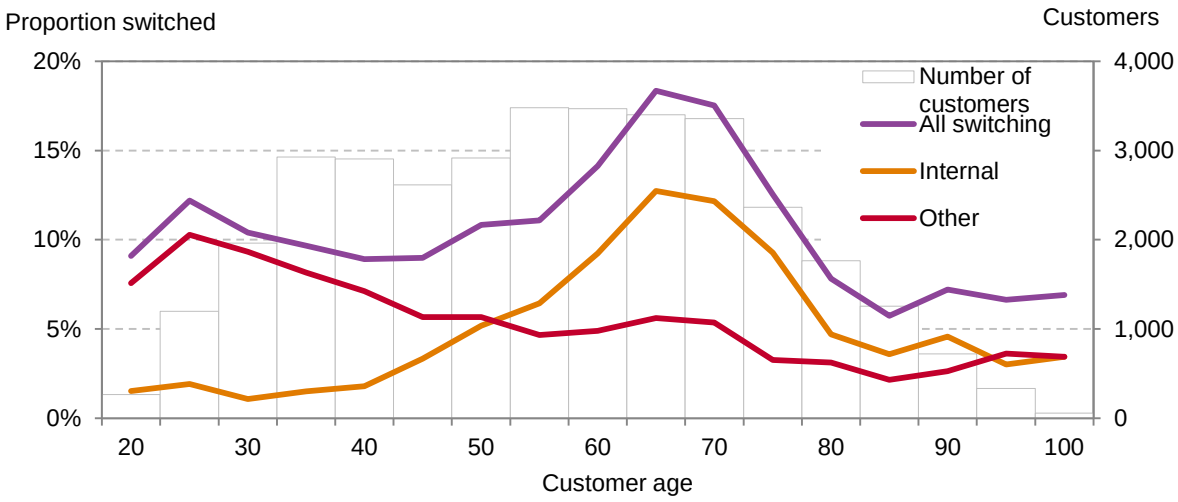
Customer age

Prediction 5: All interventions will increase switching more by customers in retirement.

Prediction 5 is mostly supported by our findings: in the control groups the switching level was higher among consumers aged more than 60 years, and customers aged more than 60 years responded to interventions more in some trials.

While older customers were more likely to switch internally than younger customers, younger customers were more likely to switch in other directions.[18] This observation highlights two relationships. First, higher switching level among customers aged 60-80 years consistent with lower opportunity costs of time. However, switching falls for customers aged >80 years compared to those 60-80 years old – in line with previous research findings that overall financial capability peaks at a certain age and then declines (Agarwal et al, 2009). Second, higher Other switching among young customers is consistent with lower cognitive cost of accessing and acting upon a wider set of information.

Figure 12: Customer age and switching in the control groups



The effects of our interventions differed by age group across the trials (Table 9). The front page switching box and, indicatively the digital reminders, were most effective on the oldest customers (aged >80 years), while the switching form and the reminders had similar effects on all age groups. The effects of interventions by age are partially consistent with results of previous FCA trials: Adams & Hunt (2013) and Adams et al (2015a) find that older customers were more likely to respond to firm communications requiring action in redress and cash savings, while Adams et al (2015b) find no difference by age in general insurance auto-renewals.

[17] The majority of customers did not reduce their balances by much during the data collection period (13-24 weeks varying by trial). 64% of customers in the control group who didn't switch did not reduce their savings balance, while 80% did not reduce it by more than 25%.

[18] This result is driven by the digital reminder trial, where switching was higher than in other trials (Table 9 in Annex 3).

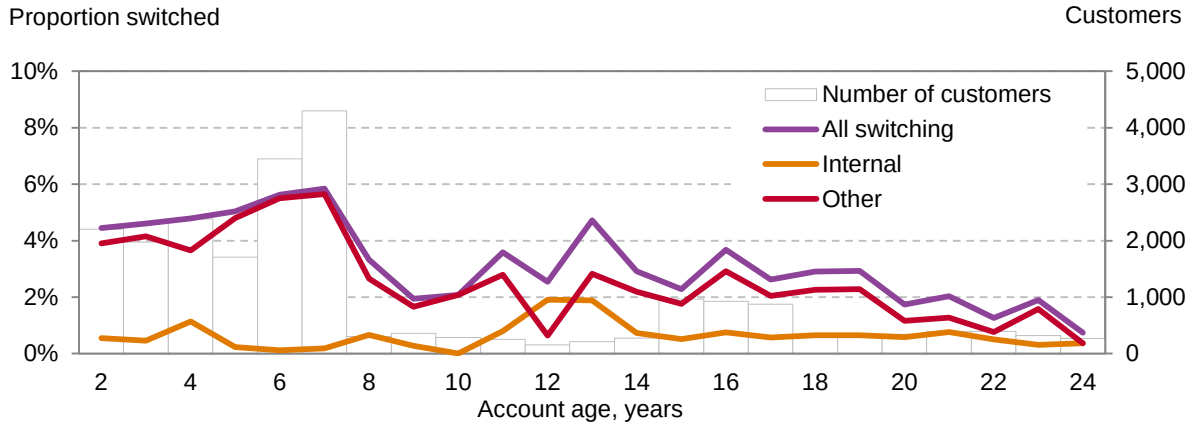
Age of account

Prediction 6: The interventions will increase switching more by customers who have held their accounts for a shorter period of time.

Prediction 6 is partially supported by the findings: older accounts switched less often, but the switching form was more effective on older accounts than on newer accounts.[19]

The negative relationship between account age and switching in the control group holds for Other switching, but not for Internal switching (Table 11). This result is consistent with long-standing customers having a lower preference for Other switching, probably because of a higher convenience cost and brand effects. No difference in Internal switching by account age suggests that the cost is not increasing with the number of years, and likely consists of paying attention and making a one-off effort.

Figure 13: Account age and switching in the control groups



Excludes digital reminder trial, where all accounts were less than 2 years old and had a significantly higher switching rate (40%).

The switching form was more effective on accounts opened >10 years ago, compared to accounts opened less than five years ago, consistent with a view that the switching form would be more likely to help customers who have little experience in switching their account recently (Table 11 in Annex 3). The switching box and reminders were more effective on more recently opened accounts, which is consistent with inertia and low overall propensity to switch reducing the effects of information.

Holding of personal current account (PCA)

Customers in the trial sample who held a personal current account with the same provider as their savings account were 1-6 percentage points more likely to switch their savings, both internally and to other accounts (Table 13 and Table 14 in Annex 3). A possible reason is that consumers are more likely to monitor and re-optimise their savings account if they notice the relevant information alongside checking their current account balances. We found no evidence of treatments having consistently different effect on customers with and without a PCA, except in the digital reminder trial where holding a PCA reduced the effect of the reminder on Other switching.[20]

[19] Looking by trial, the pattern varies. Older accounts were less likely to switch in the front page switching box trial and the SMS reminder trial, and more likely to switch in the reverse page switching box trial. There was no difference by account age in the switching form trial.

[20] Similarly, across all trials the probability of switching was higher the more retail financial products the customer held with the provider. Treatments were less effective in increasing Internal switching the more products the customer held, and had no different effect on Other switching by the number of products held (Table 16 in the Technical appendix).

Survey evidence

In this section we describe the key findings of the follow-up surveys. We conducted the surveys with 261 consumers from the sample of the Front page switching box trial and with 500 consumers from the sample of the Reverse page switching box trial. Both survey samples were largely composed of long-standing customers with low overall propensity to engage with their savings. However, we note that participation in the follow-up survey was voluntary and the sub-set of customers who engage with their savings more were more likely to agree to answer the survey. Both surveys were conducted over the phone within three weeks after we stopped collecting data on trial outcomes by a research company. We imposed quotas on the survey sample along two dimensions: observed switching behaviour and starting balance. As anticipated, around one in ten contacted customers agreed to complete the phone interview which lasted up to 15 minutes. More details on survey design, including the survey questionnaires, can be found in Part 2 of the Technical appendix.

In the survey we measured:

- recall (interest rate, interest rate change, and communications received)
- intermediate actions of customers (shopping around, and the time it took)
- subjective evaluations (satisfaction with the individual decision taken)

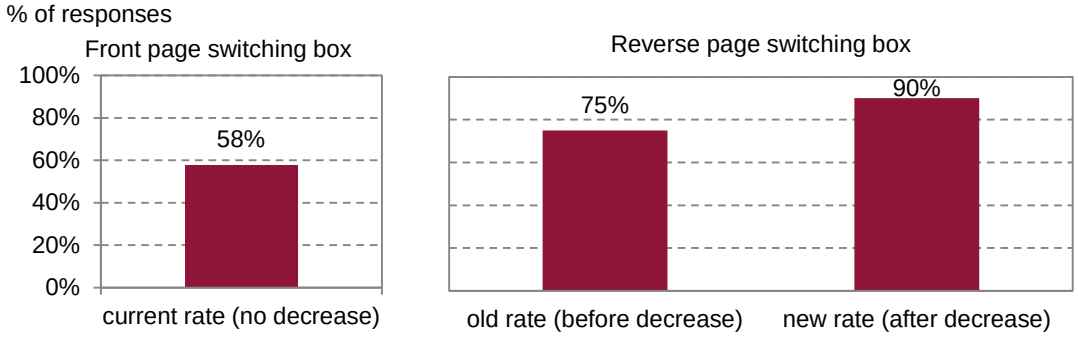
To ensure a degree of response quality in the survey, we asked customers to indicate which providers they held their savings account with. We terminated interviews with a small number of customers who failed to indicate they had or until recently had had an account with the provider in question even after being prompted. Further, we asked customers who were eligible to continue the survey to recall details about the account in question, including basic properties such as interest rate payable and the actions they took. We matched survey responses to the administrative data provided by the institutions.

For a substantial share of customers actions recorded in the administrative data and actions reported in the survey did not match. There was a bias in under-reporting of action by those who took action, compared to over-reporting of action by those who did not take action. We attribute this mismatch to a combination of imperfect recall, lack of incentives to report truthfully, and possibly drawbacks in questionnaire design. We interpret the responses related to reported and intended action and recall of information with caution and focus on key findings as reported below.

Attention

The survey shows that customer awareness of their interest rate and recent changes to the rate was not widespread. Most respondents were not aware of the interest rate they were receiving on their savings account and the vast majority of those who estimated the rate upon prompting thought the rate was higher than the actual rate (Figure 14).

Figure 14: Customer that overestimate the interest rate relative to actual rate



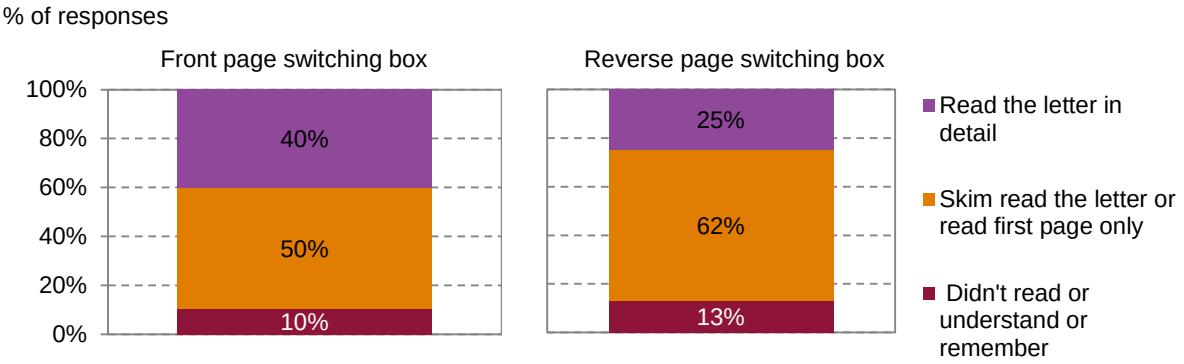
Question: What was/is the interest rate on your account? Note: Base 80 customers in the front page trial, and 85 and 105 customers who reported an old and new rate, respectively, in the reverse page trial.

In both surveys the majority of respondents indicated that by far the most important single factor to make them consider switching their savings would be an equivalent product with a higher interest rate available with their current provider - 48% in the front page switching box trial and 36% in the reverse page switching box trial. For comparison, 4% of customers in the front page switching box trial and 8% in the reverse page switching box trial indicated a better rate available with another provider as the most important factor to switch – consistent with most consumers switching internally. However, a substantial proportion of respondents reported that they were not aware that their provider offered a higher rate on an equivalent account (56% in the front page trial survey and 58% in the reverse page trial survey).

Search and comparison

The recall of any recent communication from their provider related to better available interest rates was modest – approximately 40% of customers in both surveys did not recall the letter or the annual statement. Of those respondents who remembered receiving a communication from their provider, 75% and 60% in the digital and SMS reminders respectively, reported that they did not read beyond the first page or only skim-read the communication (Figure 15).[21] Customers in the age group of 60-80 years were most likely to recall and have read the letter in detail – by 25 and 15 percentage points more, respectively, relative to customers aged 40 years or younger. Gains from switching or the age of account did not predict whether customers recalled or read the communication in detail.

Figure 15: Customers who read the rate change letter or the annual statement



Question: Did you read this statement? Note: 144 customers in the front page trial, and 303 customers in the reverse page trial

Both surveys showed that respondents who remembered receiving the letters found it difficult to recall the details without explicit prompting by the interviewer (Figure 1 and Figure 2 in the Technical appendix). When prompted explicitly, respondents reported recalling details of both the control letters and the treatments. However, many respondents, especially in the front page switching box trial recalled information that they did not receive, which points to a difficulty to recover factual information using survey methods.

Decision to switch and implementation

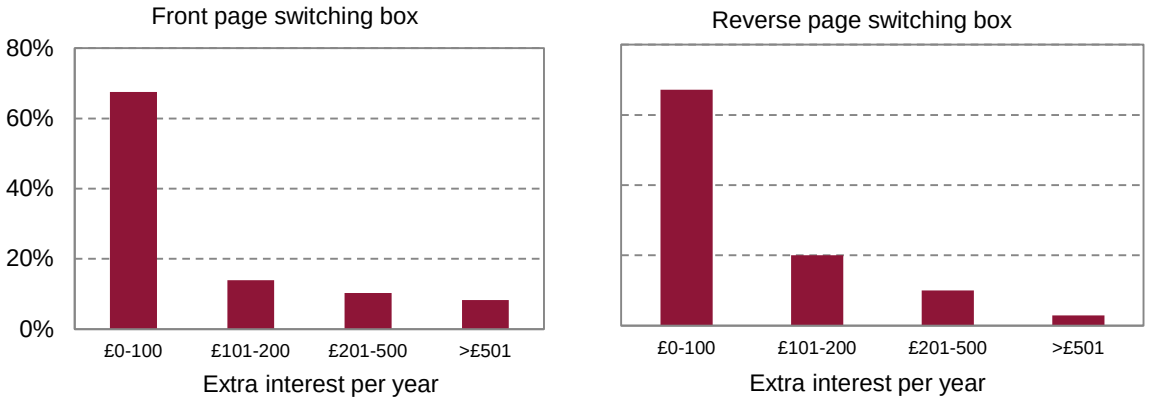
Gains from switching. One third of respondents in both surveys said they would require a gain of £100 or more per year to switch, while two thirds would switch for £100 or less per year (Figure 16). In our sample, where the potential gains were significantly higher than the market average, 26% of customers had £100 or more to gain. The high proportion of customers for whom the potential gains were lower than their reported cost of switching could explain why many customers did not switch.

[21] There is no significant correlation between being able to approximately recall the current/new interest rate and reading the letter. A slightly higher proportion in the front page trial survey who read the annual statement in detail was able to recall the interest rate (42% vs 32%). Older customers and customers with higher monetary gains were somewhat more likely to recall and have read the letter (Tables 22 and 23 in the Technical appendix).

However, we note that if required gains from switching remained similar and the difference in interest rates were to increase modestly in absolute terms, the net gains from switching would rise substantially in relative terms. In turn, this could make information about potential gains from switching relevant to more consumers and therefore increase its effectiveness.

Figure 16: Reported extra interest per year to consider switching savings account

% of responses



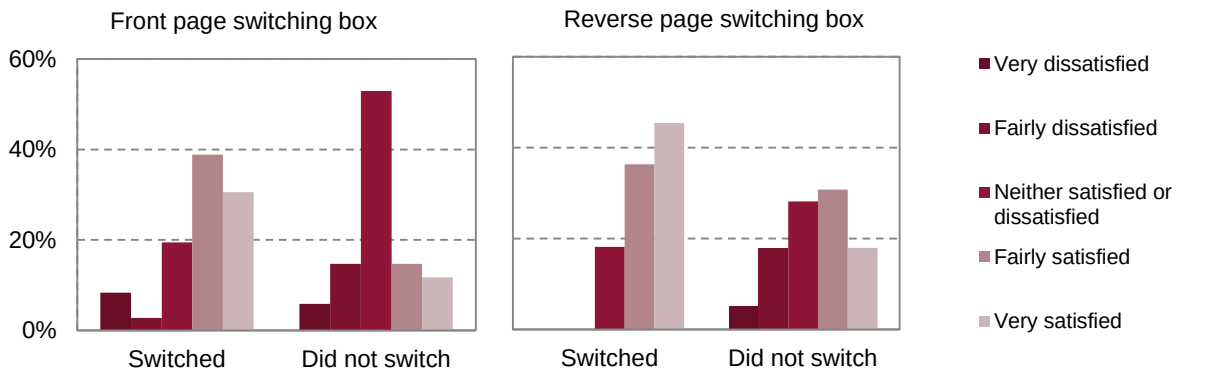
Question: What would be the minimum extra amount of interest in money (rather than a %) per year to make it worth switching your savings to a different account? Note: 70 customers in the front page trial, and 194 customers in the reverse page trial

Effort and time to search and switch. In both surveys customers found searching as easy as expected, or easier than expected. In the front page switching box trial, 60% of respondents who reported having searched for alternative accounts found the process of searching a little or much easier than expected. In the reverse page switching box trial, 42% of customers who switched rated the process of searching 'easier than expected', while this accounted for only 14% of the customers who did not switch. Eighty percent of customers in the front page switching box trial and two thirds of customers in the reverse page switching box trial said they spent no longer than 2 hours searching for an alternative account. Regardless of final action, the majority of surveyed customers in both groups said searching took them as long as expected.

We estimate the time it took to switch internally to be around 15 minutes on average in the switching box trials and somewhat longer for External switching. We find that 83% of internal switchers in the reverse page switching box trial said it took them no longer than 30min to open a new account (54% of other switchers said that). 71% of internal switchers in the front page switching box trial said it took them no longer than 30min to open a new account (62% of other switchers said that).

Satisfaction with decision. When evaluating the decision they made, respondents who switched their account reported to be more satisfied than respondents who did not switch their account (Figure 17).

Figure 17: Level of satisfaction with the decision by customers who switched and didn't switch



Question: How satisfied would you say you are that you changed accounts and stayed with the same provider / changed to a different provider / you withdrew most or all of the money in the account / you closed the account? Note: 67 customers in the front page trial, and 71 customers in the reverse page trial.

Effects of treatments on survey outcome measures

In the front page switching box trial, treatments had a positive significant effect on the awareness of a better internal rate (Figure 3 in the Technical appendix), but not on other survey outcome measures, including the likelihood of thinking about switching, searching for better accounts and the number of accounts compared. Treatments in the reverse page switching box trial had no significant effect on survey outcome measures, including consideration to switch, awareness of their interest rate, shopping around and recall of the communication received.

In summary, survey findings suggest that a large proportion of consumers do not actively engage with choosing optimal savings accounts and do not follow communications from their providers. Many of those who do engage review the communications quickly and remember only the key aspects.

5 Conclusion

The role of disclosure in retail financial markets has to date been assessed mostly in relation to consumer protection. For example, Campbell, Jackson, Madrian, and Tufano (2011) advocate robust consumer financial protection and conclude that while disclosure is a worthwhile measure, it may not be sufficient to ensure an appropriate degree of consumer protection in all circumstances.

In this paper we examined the role of disclosure in stimulating switching to more competitive products. We conducted an experiment on savings accounts, a retail financial market with relatively homogeneous product features and high prevailing price dispersion, an equilibrium likely supported by consumer inertia. We tested the importance of disclosure design features and examined explanations for their role in affecting consumer financial decisions. We provided direct evidence using randomised controlled trials conducted to inform policy development by the UK regulator – the Financial Conduct Authority.

Good timing, salience of better alternatives, and a straightforward way to take an informed action helped to mitigate the obstacles consumers face, and to some extent increased switching to better alternative products. However, disclosure interventions stimulated switching only within the current providers and had no effect on switching to better-paying products offered by other providers. Our interventions, especially the return switching form, had modest positive effects in increasing switching by long-standing customers on a low interest rate. Our findings reveal that while in some segments of the market there is a notable level of switching when interest rates decrease, limited consumer attention, coupled with the inconvenience of switching, prevents widespread account switching.

When firms have several dimensions of disclosure design left to their discretion, there are simple ways to present required information content that limits its salience to consumers, with the classical example being fine print. While the details of design, timing and delivery of our disclosure can alter its effectiveness without materially affecting costs, the overall effects of our most effectively designed disclosure on account switching remain modest. It is possible that the effects of disclosure would become more pronounced once customers become more habituated to receiving this type of information from their providers, or when returns on savings rise. Our survey and qualitative research findings, however, indicated that attention to disclosure is low and that consumers reacted cautiously to disclosure from their providers about better alternative accounts. This suggests that beyond testing and optimising disclosure the regulators need to consider a wider set of interventions that are better targeted at achieving more substantial improvements in the market outcomes for many customers of retail banking services.

Finally, there may also be unintended consequences of mandatory disclosure of interest rates. Duarte and Hastings (2013) show that consumers may overly fixate on disclosed dimensions at the expense of other product characteristics. While this is perhaps less of a concern in our setting because of deposit insurance, electronic access, and the fact that savings accounts are relatively homogenous products, firms interested in obfuscating lower prices (higher interest rates) still have many tools at their disposal.

Annex 1: Review of previous research

The role of disclosure

A significant literature in industrial organization, behavioural economics, household finance, law, and marketing critically examines disclosure regulations in many consumer markets. A complete treatment of these literatures is outside the scope of this paper; see Dranove and Jin (2010) and Ben-Shahar (2010) for comprehensive surveys of disclosure-related research. These papers provide evidence for heterogeneity in disclosure effectiveness, highlighting both disclosure success stories and failures. At best, the disclosure literature is left to attribute variation in disclosure effectiveness to design details with loose arguments comparing and contrasting estimates across studies. In contrast, we experimentally vary disclosure design for a single product with a relatively clear hierarchy of consumer benefits, allowing us to make causal assertions about the relative importance of disclosure content and design features in generating benefits for consumers.[22]

There are several impediments to disclosures having an effect on outcomes. In practice, consumer choice is sticky. Across an array of economic decisions including health insurance plans, retirement investment plans, bank accounts, cell phone plans, and gym memberships, individuals appear reluctant to re-optimise.[23] While it may be that foregone utility from not re-optimising is small, there are several prominent cost-side explanations for apparent inertia in consumer behaviour, several of which we discuss below.

Switching costs

Switching costs, including convenience costs and the loss of value of complementary choices (such as network effects), prevent ex-post provider switching (Farrell and Klemperer, 2007). Burnham, Frels, and Mahajan (2003), decompose switching costs into procedural costs (time and effort), financial costs, and relational costs (psychological/behavioural). They find all three types of costs are more important than satisfaction in explaining why consumers stay with their current providers. On deposit accounts in particular, Kiser (2002) examines the role of self-reported switching costs in predicting switching behaviour, finding particularly high switching costs (and low levels of switching) among people on the ends of age, geographic mobility, and income spectrums.

Search and comparison

To the extent that lacking information is a significant reason for sticky (and often suboptimal) consumer choice, disclosures have potential to affect decisions.[24] A rich literature on rational

[22] Although their setting is heterogeneity in advertising not disclosure, a related study is Bertrand et al. (2010), whose field experiment tests for the importance of various design features in stimulating loan demand. In contrast to our setting, they are limited to studying advertising persuasiveness per se instead of whether advertising design features matter for consumer benefits because of the difficulty of asserting optimal consumer behaviour in their setting.

[23] See Samuelson and Zeckhauser (1988), Choi et al. (2011), Ericson (2014), and many others for inertia in health insurance and retirement plan decisions. Grubb and Osborne (2015) and Della Vigna and Malmendier (2006) document evidence of stickiness in cell phone plan choice and gym memberships, respectively. Ater and Landsman (2013) document the slow learning of retail deposit account holders.

[24] See also the literature on the importance of financial literacy surveyed in Lusardi and Mitchell (2014), perhaps a necessary condition for effective financial disclosure.

inattention in macroeconomics (e.g. Sims, 2003) offers several search-costs-based explanations for such behaviour.[25] In search-theory models, consumers do not update their choices because they are uninformed about attractive alternatives and becoming informed requires costly effort. If the (often non-monetary) cost of acquiring information about competitive alternative choices to their current decision exceeds expected gains from such activities, then the inattention is said to be rational. Calem, Gordy, and Mester (2006) provide evidence on the persistence of credit card interest rates at high levels, and the existence of informational barriers and switching costs, though they find there may have been some decline in informational barriers since Calem and Mester (1995). By contrast, consumers may choose to ignore even costless information about alternatives to avoid cognitive costs such as the disutility of feeling overwhelmed by the complexity of pricing (Grubb, 2005), inadequate financial literacy to weigh options (Calvet et al., 2009), or an abundance of choices (Schwartz, 2004).

Inattention and procrastination

Consumers who find it difficult to commit to executing a planned action may fail to switch even if they are costlessly informed of better value products because they procrastinate taking the action indefinitely.[26] Work in behavioural economics on commitment-problems provides evidence for the prevalence of procrastination and the difficulty of completing intended tasks.[27] An established literature documents the importance of default choices in retirement plans (e.g. Choi et al., 2011) because consumers in general seem reluctant to participate in opt-in programs.

Consequences of consumer mistakes

Finally, this paper contributes to a broad literature documenting consumer financial mistakes, and the role of disclosures in preventing them, including several studies on undersaving. Karlan, McConnell, Mullainathan, and Zinman (2016) use evidence from three field experiments to show the effectiveness of reminders in increasing saving commitment attainment. They provide a model where limited attention generates under-saving, which is mitigated by reminders. Stango and Zinman (2009) find that consumers systematically underestimate interest rates on short-term loans and underestimate the benefits of long-term saving. Campbell, Jackson, Madrian, and Tufano (2011) argue for robust consumer financial protection, using mortgage choice, payday lending, and retirement saving as case studies in consumer finance market failures. Agarwal, Chomsisengphet, Liu, and Souleles (2015) analyse the results of a bank experiment which offered customers a choice between two credit card contracts. They find that while, on average, consumers chose the contract that minimized their costs, nearly 40% did not. Suboptimal choice was less likely when the estimated magnitude of the potential error was greater (and those with larger potential errors were more likely to subsequently switch into the optimal contract). Finally, Duarte and Hastings (2012) document that Mexican mandated disclosure laws around index fund fees caused substantial switching and a competitive response from firms.

[25] See also DellaVigna (2009) for a survey of the limited attention literature in behavioural economics.

[26] Alongside insufficient search and inertia, Grubb (2015) also identifies confusion about the complexity of pricing as a third likely reason for the failure to optimise. We argue that in our setting of savings accounts, whose prices are largely one-dimensional, confusion is likely to be low.

[27] Again, see DellaVigna (2009) for a survey of the self-control literature. O'Donoghue and Rabin (1999) model self-control problems in the context of savings decisions in particular. In their model, the naïve procrastinate immediate-cost activities.

Annex 2: Treatment examples

Front page switching box

Treatment 1: 'Call to action'.

<technical summary>

<account details>

Check your account is still right for you.

You've had your <account> for a little while now, and we know how important it is to make the most of your savings. So now might be a good time to consider if it's still the best option or whether there's another savings account out there that could pay more interest or suit you better.

Your <account> currently offers:

- An interest rate of <x.x%> variable
- <conditions in relation to minimum deposit,
- withdrawals, and
- frequency of interest payments>

How this account compares.

We have a range of savings accounts available that could get you more from your money. Find out more at <weblink>

Let us know.

Making the move to another savings account is simple – sign in at <weblink> and select 'renewal options', call us on <phone> or pop in branch. If you'd prefer to carry on saving in your <account> you don't need to do anything.

Treatment 4: 'Best internal + market + graph'.

<technical summary>

<account details>

Important Information for you

Check your account is still right for you.

You've had your <account> for a little while now, and we know how important it is to make the most of your savings. So now might be a good time to consider if it's still the best option or whether there's another savings account out there that could pay more interest or suit you better.

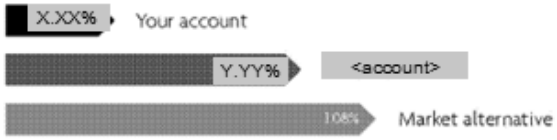
You <account> currently offers:

- An interest rate of <X.X%> variable
- <conditions in relation to minimum deposit, withdrawals, and frequency of interest payments>

How this account compares.

As of 10th August the savings account with the most similar features that we can offer is our <account> with an interest rate of Y.YY% , but there may be other suitable accounts within our range.

Taking a look at the wider savings market, the three highest-paying easy access accounts across the market on 10th August offered an average rate of **1.08% variable**. You can find out more about these options at **www.moneysupermarket.com**



Interest you could earn this year on every £10,000 of savings.

<current savings account>	£X.XX
<alternative internal savings account>	£X.XX **(£A.AA more)**
Highest paying accounts on the market*	£108.00 **(£83.00 more)**

Let us know.

Making the move to another savings account is simple – sign in at <weblink> and select <option> , call us on <phone> , or pop in branch. If you'd prefer to carry on saving in your <account> you don't need to do anything.

*Based on an average of the three highest paying equivalent accounts on the market at 10th August 2015 using moneysupermarket.com. Restrictions and exclusions may apply.

Reverse page switching box

Left: front page of the rate change letter (control and treatment groups). Right: reverse page switching box (personalised, with competitor rates).

<Name>
<Address 1>
<Postcode>

<firm name and address>

<Date>

Your <A/C name> account rate is reducing in <date>.

Dear <Name>,

Following a review of savings rates, we're writing to let you know that the interest rate on your <A/C name> account will change from <date>.

The rate applied to your <A/C name> account is currently:

Account	Account number	Rate applied on balances from:	AER/gross %	Net %
<A/C name>	<XXXX1234>	£0+	<X.XX%>	<X.XX%>

From 25 August 2015, the variable rate below will apply:

Account	Account number	Rate applied on balances from:	AER/gross %	Net %
<A/C name>	<XXXX1234>	£0+	X.XX%	Y.YY%

As we will be changing the interest rate on your account, you do have the option to close your account or move your money elsewhere without charge. We do offer some other easy access savings accounts that you may be eligible for. **More information on alternative accounts is provided on the back of this letter.**

If you decide to close your account, move your money elsewhere or want to speak to us about our other savings accounts, we'd be happy to help you. If we don't hear from you before <date>, we'll assume that you've accepted this change.

If you have any questions about this change or would like to speak to <firm name>, please call us on <phone> or visit <weblink>

Thank you for saving with <firm name>

Yours sincerely,

<name>
<position>

Continued overleaf

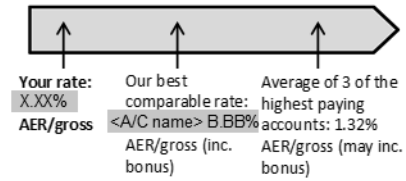
COULD YOU GET A BETTER RETURN ON YOUR <firm name> SAVINGS?

Your account: <A/C name>

Your balance: **<£5,432> as at 30 April 2015**

Your new interest rate: X.XX% **AER/gross**

Account type: <A/C name> – you can withdraw money without charge



How does my savings account compare?
As at 26 May 2015, the highest interest rate available from <firm name> account is B.BB% AER/gross on our <A/C name> (inclusive of <length> introductory bonus of C.CC% AER/gross). The <A/C name> is an easy access account that can only be managed online using Internet Banking – you cannot access the account in branch or over the phone.

Three of the highest paying easy access account offered by other banks and building societies offer an average rate of A.AA% AER/gross. Price comparison websites can provide information on rates offered by other providers.

How much more could I earn in interest?
A balance of £5,432 in a <firm and A/C name> would earn £X.XX this year.

Best comparable <alternative with firm> £Y.YY **in total** (or £A.AA more) a year.

Average of three of the highest paying accounts on the market: <£xx.xx> **in total** (or <£xx.xx> more) a year.

Moving your money is easy.
To move your money to <alternative with firm>, simply call us on <phone>, visit <weblink> or visit us in branch to find out more. To move your money to an account offered by an alternative provider, open a new account with them and transfer your funds.

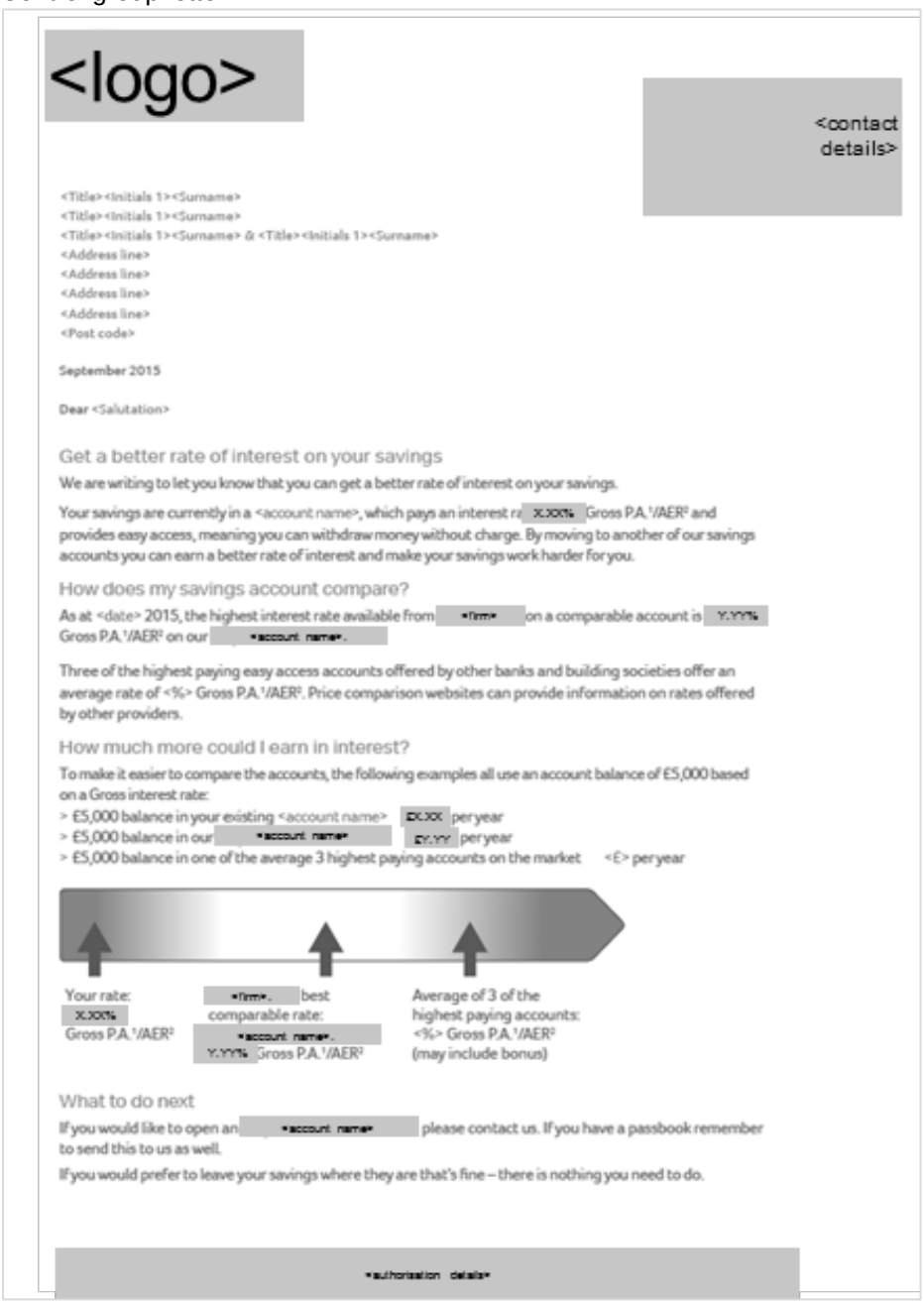
Average of 3 of the highest paying accounts currently on offer on the market at 26 May 2015 using moneyfacts.co.uk. Some restrictions may apply.
Calculations based on interest rates at 26 May 2015 and show interest earned prior to appropriate tax deductions dependent on your individual circumstances and your current tax status. Rates are variable and subject to change. To open an <A/C name> account you must be 16 or over, and have a current account with us.

If you'd like this in another format such as large print, Braille or audio please ask in branch.

<directions to customers with hearing or speech impairment>

Return switching form

Control group letter



<logo>

<contact details>

<Title><Initials 1><Surname>
<Title><Initials 1><Surname>
<Title><Initials 1><Surname> & <Title><Initials 1><Surname>
<Address line>
<Address line>
<Address line>
<Address line>
<Post code>

September 2015

Dear <Salutation>

Get a better rate of interest on your savings

We are writing to let you know that you can get a better rate of interest on your savings.

Your savings are currently in a <account name>, which pays an interest ra X.XX% Gross P.A.[1]/AER[2] and provides easy access, meaning you can withdraw money without charge. By moving to another of our savings accounts you can earn a better rate of interest and make your savings work harder for you.

How does my savings account compare?

As at <date> 2015, the highest interest rate available from *firm* on a comparable account is Y.YY% Gross P.A.[1]/AER[2] on our *account name*.

Three of the highest paying easy access accounts offered by other banks and building societies offer an average rate of <%> Gross P.A.[1]/AER[2]. Price comparison websites can provide information on rates offered by other providers.

How much more could I earn in interest?

To make it easier to compare the accounts, the following examples all use an account balance of £5,000 based on a Gross interest rate:

> £5,000 balance in your existing <account name> £X.XX per year
> £5,000 balance in our *account name* £Y.YY per year
> £5,000 balance in one of the average 3 highest paying accounts on the market <£> per year

Your rate: X.XX% Gross P.A.[1]/AER[2]

firm best comparable rate: *account name* Y.YY% Gross P.A.[1]/AER[2]

Average of 3 of the highest paying accounts: <%> Gross P.A.[1]/AER[2] (may include bonus)

What to do next

If you would like to open an *account name* please contact us. If you have a passbook remember to send this to us as well.

If you would prefer to leave your savings where they are that's fine – there is nothing you need to do.

authorisation details

Treatment group letter

<logo>

<contact details>

<Title> <Initials 1> <Surname>
<Title> <Initials 1> <Surname>
<Title> <Initials 1> <Surname> & <Title> <Initials 1> <Surname>
<Address line>
<Address line>
<Address line>
<Address line>
<Post code>

September 2015

Dear <Salutation>

Get a better rate of interest on your savings

We are writing to let you know that you can get a better rate of interest on your savings.

Your savings are currently in a <account name>, which pays an interest ra X.XX% gross P.A.[1]/AER[2] and provides easy access, meaning you can withdraw money without charge. By moving to another of our savings accounts you can earn a better rate of interest and make your savings work harder for you.

How does my savings account compare?

As at <date> 2015, the highest interest rate available from *firm* on a comparable account is Y.YY% Gross P.A.[1]/AER[2] on our *account name*.

Three of the highest paying easy access accounts offered by other banks and building societies offer an average rate of <%> Gross P.A.[1]/AER[2]. Price comparison websites can provide information on rates offered by other providers.

How much more could I earn in interest?

To make it easier to compare the accounts, the following examples all use an account balance of £5,000 based on a Gross interest rate:

> £5,000 balance in your existing <account name> £X.XX per year
> £5,000 balance in our *account name* £Y.YY per year
> £5,000 balance in one of the average 3 highest paying accounts on the market <£> per year

Your rate: X.XX% Gross P.A.[1]/AER[2]

firm best comparable rate: *account name* Y.YY% Gross P.A.[1]/AER[2]

Average of 3 of the highest paying accounts: <%> Gross P.A.[1]/AER[2] (may include bonus)

What to do next

If you would like to open an *account name* please contact us. If you have a passbook remember to send this to us as well.

If you would prefer to leave your savings where they are that's fine – there is nothing you need to do.

authorisation details

I would like to switch my savings to the <account name> account

<Deposit account> <Account number>

<title> <initial> <surname> <and> <title> <initial> <surname>
<title> <initial> <surname> <and> <title> <initial> <surname>

How much would you like to transfer?
Either choose "Transfer all" or fill in the amount you want to transfer from your <deposit account>.

Transfer all ☐ Transfer part of my savings £ ☐

How would you like your interest paid? Annually ☐ Monthly ☐

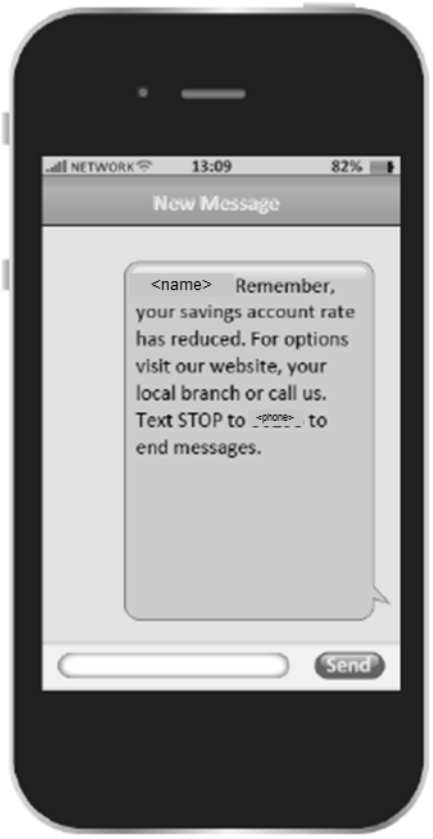
Interest will be paid to the same account as the interest from your <deposit account>. If you would like to change this, please tell us in writing.

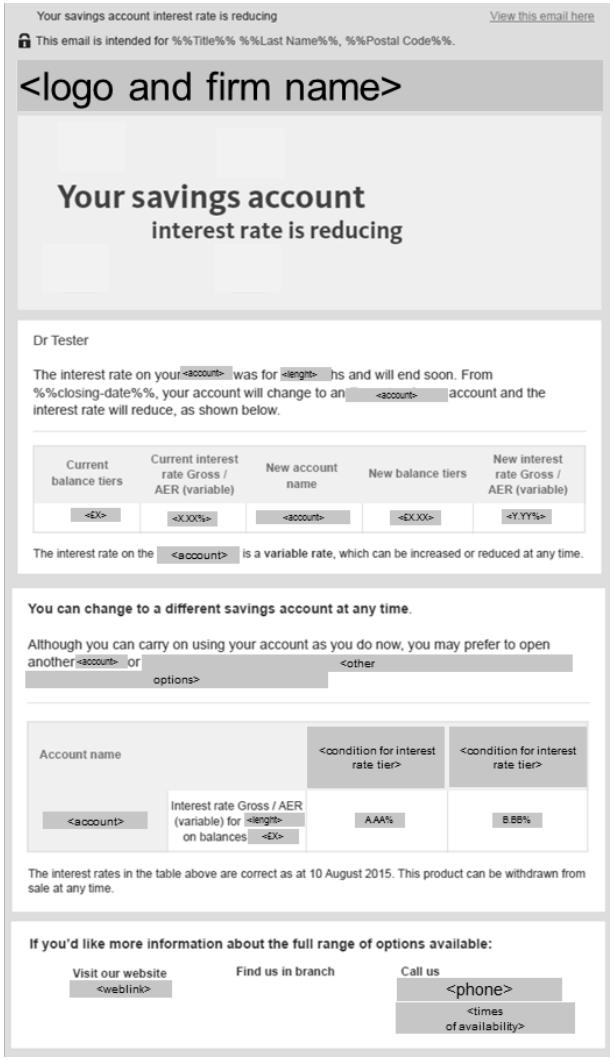
<declaration details>

Signature(s) Date

Digital (email and SMS) reminder

Left: email reminder. Right: SMS reminder.





SMS reminder

Treatments:

One week before rate change:	"Reminder: the interest rate on your <firm and> account> will reduce from <date>. Log on to online banking to assess your savings options."
Day of rate change, Version 1:	"Reminder: the interest rate on your <firm and> account> will reduce today. Log on to online banking to assess your savings options."
Day of rate change, Version 2:	"Reminder: the interest rate on your <firm and> account> will reduce today. This is the highest instant access rate on a non-ISA savings account"
One week after rate change:	"Reminder: the interest rate on your <firm and> account> reduced on <date> Log on to online banking to assess your savings options."

Annex 3: Tables

Descriptive statistics

Table 4: Descriptive statistics of consumers

Variable	N	mean	min	max	p25	p50	p75
Front page switching box trial							
age	63,331	59.1	2	103	48	60	71
gender	61,938	0.42	0	1	0	0	1
PCA dummy	63,391	0.25	0	1	0	0	0
Account balance, £	63,381	8,432	-10	1,785,941	675	2,594	8,038
Account age	63,391	13.7	1.4	51.7	4.1	10.5	21.4
Number of products with provider	63,391	1.6	1	7	1	1	2
Share used online banking	63,391	0.09	-	-	-	-	-
Share used mobile banking	63,391	0.09	-	-	-	-	-
Reverse page switching box trial							
age	13,318	53.2	19	112	39	52	66
gender	13,289	0.41	0	1	0	0	1
PCA dummy	13,327	0.79	0	1	1	1	1
Account balance, £	13,302	7,406	-	1,218,128	300	1,402	6,000
Account age	13,327	6.7	0.3	7.3	6.9	7.1	7.2
Number of products with provider	13,327	4.5	1	23	3	4	6
Share used online banking	13,327	0.57	-	-	-	-	-
Share used mobile banking	13,327	0.29	-	-	-	-	-
Return switching form trial							
age	4,108	64.4	18	114	53	64	77
gender	4,021	0.45	0	1	0	0	1
PCA dummy	4,126	0.06	0	1	0	0	0
Account balance, £	4,126	6,837	25	314,253	149	1,008	5,500
Account age	4,126	16.1	5.2	28.1	15.4	16.0	17.4
Number of products with provider	4,126	1.6	1	21	1	1	2
Share used online banking	-	-	-	-	-	-	-
Share used mobile banking	-	-	-	-	-	-	-
Digital (email and SMS) reminder trial							
age	24,652	52.9	16	104	42	56	65
gender	24,652	0.48	0	1	0	0	1
PCA dummy	24,652	0.77	0	1	1	1	1
Account balance, £	24,652	37,939	1,000	2,000,000	4,000	12,816	40,000
Account age	24,652	1.0	0.9	1.1	0.9	1.0	1.1
Number of products with provider	24,652	4.6	1	33	3	4	6
Share used online banking	24,652	0.84	-	-	-	-	-
Share used mobile banking m	24,652	0.22	-	-	-	-	-
SMS reminder trial							
age	30,460	42.4	18	99	32	38	52
gender	30,459	0.51	0	1	0	1	1
PCA dummy	30,461	0.97	0	1	1	1	1
Account balance, £	30,205	24,162	1	5,798,907	1,456	7,183	22,245
Account age	30,461	4.7	0.1	7.6	2.3	5.4	6.9
Number of products with provider	30,461	5.4	1	30	3	5	7
Share used online banking	30,461	0.90	-	-	-	-	-
Share used mobile banking	30,461	0.30	-	-	-	-	-
Total	134,129						

Note: we removed 1,644 entries from the Front page switching box trial and 1,128 entries from the Reverse page switching box trial. These data were duplicates by account number. Those entries represented secondary, tertiary and so on, account holders.

Table 5: Means of demographic variables and tests of equality of means

	Age	Balance £	Gender (% male)	Checking account holding (%)	Account age (years)	Customer relation-ship (years)	Joint test P-value
1 Front page switching box							
Control	59.2	8,663	0.42	0.25	13.74	-	
Treatment	59.1	8,371	0.42	0.25	13.68	-	
Test P-value	*0.46*	*0.04*	*0.41*	*0.22*	*0.95*	-	*0.22*
2 Reverse page switching box							
Control	54.4	7,533	0.41	0.75	6.74	-	
Treatment	53.5	7,624	0.40	0.75	6.71	-	
Test P-value	*0.01*	*0.30*	*0.50*	*0.20*	*0.28*	-	*0.19*
3 Switching form							
Control	64.6	6,732	0.44	0.06	16.00	-	
Treatment	65.1	6,943	0.46	0.06	16.11	-	
Test P-value	*0.65*	*0.40*	*0.26*	*0.69*	*0.59*	-	*0.68*
4 Digital reminder							
Control	51.6	37,210	0.48	0.78	0.95	-	
Treatment	51.8	36,526	0.47	0.78	0.95	-	
Test P-value	*0.16*	*0.95*	*0.94*	*0.99*	*0.16*	-	*0.65*
5 SMS reminder							
Control	42.7	25,049	0.53	0.97	4.62	17.17	
Treatment	42.2	23,709	0.51	0.97	4.69	17.05	
Test P-value	*0.06*	*0.81*	*0.01*	*0.36*	*0.07*	*0.95*	*0.43*

Notes: Table reports covariate means for treatment and control groups. P-values reported are for the null hypothesis that the means are equal across each of the treatment groups and the control group. Tests of equality that refer to account balance use log account balance.

The joint test for the SMS reminder trial only includes account age, log of account balance and length of customer relationship, as these were the three variables than the financial institution stratified the trial groups across.

Regressions

We estimate the following specification for the sample of customers *i* for each trial (where *treatment* is a vector of *k* treatments):

$$switching_i = \alpha + \beta_k \cdot treatment_k + \gamma_1 \cdot age_i + \gamma_2 \cdot age_i^2 + \gamma_3 \cdot loggain_i + \gamma_4 \cdot loggain_i^2 + \gamma_5 male_i + \varepsilon_i$$

Table 6: Average and individual treatment effects by trial

	All switching, % of customers														
	Front page switching box			Reverse page switching box			Switching form			Digital reminder			SMS reminder		
	4 weeks after annual statement			4 weeks after notification			4 weeks after one-off letter			4 weeks after rate decrease			4 weeks after rate decrease		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
treatment	**0.0196*** **	**0.0192*** **		-0.0014	-0.0029		**0.0873*** **	**0.0895*** **		**0.0478*** **	**0.0475*** **		**0.0174*** **	**0.0160*** **	
	(0.002)	(0.002)		(0.006)	(0.006)		(0.008)	(0.008)		(0.008)	(0.008)		(0.003)	(0.003)	
treatment 1			**0.0087*** **			-0.0001			**0.0895*** **			**0.0534*** **			**0.0189*** **
			(0.002)			(0.008)			(0.008)			(0.009)			(0.005)
treatment 2			**0.0289*** **			-0.0070						**0.0417*** **			**0.0124*** **
			(0.002)			(0.007)						(0.009)			(0.004)
treatment 3			**0.0182*** **			-0.0028									**0.0116*** **
			(0.002)			(0.008)									(0.004)
treatment 4			**0.0209*** **			-0.0016									**0.0210*** **
			(0.002)			(0.008)									(0.005)
age		-0.0023***	-0.0023***		-0.0043***	-0.0043***		0.0053***	0.0053***		0.0128***	0.0128***		-0.0055***	-0.0055***
		(0.000)	(0.000)		(0.001)	(0.001)		(0.001)	(0.001)		(0.001)	(0.001)		(0.001)	(0.001)
age^2		0.0000***	0.0000***		0.0000***	0.0000***		-0.0000***	-0.0000***		-0.0001***	-0.0001***		0.0000***	0.0000***
		(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)
log monetary gain		-0.0038***	-0.0038***		-0.0032***	-0.0032***		0.0210***	0.0210***		-0.0222	-0.0223		0.0035***	0.0035***
		(0.001)	(0.001)		(0.001)	(0.001)		(0.004)	(0.004)		(0.014)	(0.014)		(0.001)	(0.001)
log monetary gain^2		0.0004***	0.0004***		-0.0022***	-0.0022***		-0.0025***	-0.0025***		0.0055***	0.0055***		-0.0022***	-0.0022***
		(0.000)	(0.000)		(0.000)	(0.000)		(0.001)	(0.001)		(0.002)	(0.002)		(0.000)	(0.000)
male		0.0012	0.0013		0.0020	0.0020		-0.0013	-0.0013		0.0158**	0.0158**		0.0118***	0.0117***
		(0.002)	(0.002)		(0.005)	(0.005)		(0.008)	(0.008)		(0.008)	(0.008)		(0.003)	(0.003)
Constant	0.0266***	0.0823***	0.0820***	0.0782***	0.2542***	0.2542***	0.0296***	-0.1739***	-0.1739***	0.4001***	-0.0968**	-0.0970**	0.0623***	0.2311***	0.2312***
	(0.001)	(0.009)	(0.009)	(0.005)	(0.025)	(0.025)	(0.004)	(0.040)	(0.040)	(0.007)	(0.038)	(0.038)	(0.002)	(0.016)	(0.016)
Observations	63,391	61,731	61,731	13,327	12,585	12,585	4,126	4,003	4,003	15,496	15,496	15,496	30,461	30,202	30,202
R-squared	0.002	0.004	0.005	0.000	0.022	0.022	0.028	0.039	0.039	0.002	0.067	0.067	0.001	0.018	0.018
Treatment legend	1: call to action; 2: best internal rate 3: best internal and competitor rates 4: best internal and competitor rates + graph			1: best internal rate, non-personalised 2: best internal rate, personalised 3: best internal and competitor rates, non-personalised 4: best internal and competitor rates, personalised			1: return switching form			1: email 2: SMS			1: SMS one week before, active frame 2: SMS on the day, active frame 3: SMS on the day, passive frame 4: SMS one week after, active frame		

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Note: this specification excludes the reverse page switching box trial, because the treatments had no effects on any kind of switching, and the SMS reminder trial, where all switching was Other switching.

We estimate the following specification for the sample of customers *i* for each trial (where *treatment* is a vector of *k* treatments):

$$\text{switching}_i = \alpha + \beta_k \cdot \text{treatment}_k + \gamma_1 \cdot \text{age}_i + \gamma_2 \cdot \text{age}_i^2 + \gamma_3 \cdot \text{loggain}_i + \gamma_4 \cdot \text{loggain}_i^2 + \gamma_5 \text{male}_i + \varepsilon_i$$

Table 7: Treatment effects on All switching, Internal switching, and Other switching

	All switching, Internal switching and Other switching, % of customers								
	Front page switching box			Switching form			Digital reminder		
	4 weeks after annual statement			4 weeks after one-off letter			4 weeks after rate decrease		
	All	Internal	Other	All	Internal	Other	All	Internal	Other
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
treatment 1	**0.0087*** **	**0.0046*** **	**0.0041** **	**0.0895*** **	**0.0787*** **	**0.0108** **	**0.0534*** **	**0.0506*** **	0.0028
	(0.002)	(0.001)	(0.002)	(0.008)	(0.006)	(0.005)	(0.009)	(0.008)	(0.007)
treatment 2	**0.0289*** **	**0.0250*** **	**0.0039** **				**0.0417*** **	**0.0371*** **	0.0046
	(0.002)	(0.002)	(0.002)				(0.009)	(0.008)	(0.007)
treatment 3	**0.0182*** **	**0.0163*** **	0.0020						
	(0.002)	(0.002)	(0.002)						
treatment 4	**0.0209*** **	**0.0201*** **	0.0008						
	(0.002)	(0.002)	(0.002)						
age	-0.0023***	-0.0001	-0.0022***	0.0053***	0.0046***	0.0007	0.0128***	0.0104***	0.0023***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
age^2	0.0000***	0.0000***	0.0000***	-0.0000***	-0.0000***	-0.0000	-0.0001***	-0.0000***	-0.0000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
log monetary gain	-0.0038***	0.0024***	-0.0062***	0.0210***	0.0129***	0.0081***	-0.0223	0.0090	-0.0313***
	(0.001)	(0.000)	(0.001)	(0.004)	(0.003)	(0.003)	(0.014)	(0.013)	(0.010)
log monetary gain^2	0.0004***	0.0004***	-0.0000	-0.0025***	-0.0012*	-0.0013**	0.0055***	0.0046***	0.0010
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
male	0.0013	-0.0002	0.0015	-0.0013	0.0030	-0.0043	0.0158**	0.0067	0.0091*
	(0.002)	(0.001)	(0.001)	(0.008)	(0.006)	(0.005)	(0.008)	(0.007)	(0.006)
Constant	0.0820***	-0.0187***	0.1007***	-0.1739***	-0.1698***	-0.0041	-0.0970**	-0.2923***	0.1953***
	(0.009)	(0.005)	(0.007)	(0.040)	(0.027)	(0.031)	(0.038)	(0.031)	(0.029)
Observations	61,731	61,731	61,731	4,003	4,003	4,003	15,496	15,496	15,496
R-squared	0.005	0.014	0.014	0.039	0.047	0.003	0.067	0.106	0.010
Treatment legend	1: call to action; 2: best internal rate 3: best internal and competitor rates 4: best internal and competitor rates + graph			1: return switching form			1: email 2: SMS		

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Note: this specification excludes the reverse page switching box trial, because the treatments had no effects on any kind of switching, and the SMS reminder trial, where all switching was Other switching.

We estimate the following specification for the sample of customers *i* in each reminder trial for each bi-weekly period *k* separately:

$$\text{switching}_{i,k} = \alpha_k + \beta_k \cdot \text{treatment}_k + \gamma_{1,k} \cdot \text{age}_{i,k} + \gamma_{2,k} \cdot \text{age}_{i,k}^2 + \gamma_{3,k} \cdot \text{loggain}_{i,k} + \gamma_{4,k} \cdot \text{loggain}_{i,k}^2 + \gamma_{5,k} \text{male}_{i,k} + \varepsilon_{i,k}$$

Table 8: Effects of timing in the digital reminder trial and the SMS reminder trial

	All switching 4 weeks after rate decrease									
	Digital reminders by date to rate decrease							*SMS reminders by date to rate decrease*		
	>4 w before	4-2 w	2-0 w before	0-2 w after	2-4 w	>4 w aft		2-0 w before	on the day	0-2 w after
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(11)
treatment	**0.0549*** **	0.0265	**0.0816*** **	**0.0363** **	**0.0588*** **	-		**0.0189*** **	**0.0119*** **	**0.0209*** **
	(0.014)	(0.017)	(0.023)	(0.018)	(0.018)			(0.005)	(0.004)	(0.005)
age	**0.0108*** **	**0.0134*** **	**0.0150*** **	**0.0147*** **	**0.0095*** **	-		**-0.0047*** **	**-0.0052*** **	**-0.0045*** **
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)			(0.001)	(0.001)	(0.001)
age^2	**-0.0001*** **	**-0.0001** **	**-0.0001** **	**-0.0001*** **	-0.0000	-		**0.0000*** **	**0.0000*** **	**0.0000*** **
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)			(0.000)	(0.000)	(0.000)
log monetary gain	-0.0277	-0.0339	0.0102	-0.0198	-0.0144	-		**0.0038*** **	**0.0036*** **	**0.0038*** **
	(0.026)	(0.030)	(0.039)	(0.029)	(0.031)			(0.001)	(0.001)	(0.001)
log monetary gain^2	**0.0051***	**0.0060***	0.0034	**0.0059***	**0.0056***	-		**-0.0021*** **	**-0.0021*** **	**-0.0020*** **
	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)			(0.000)	(0.000)	(0.000)
male	0.0081	0.0140	0.0215	0.0135	**0.0407** **	-		**0.0114*** **	**0.0092** **	0.0028
	(0.014)	(0.016)	(0.021)	(0.016)	(0.017)			(0.004)	(0.004)	(0.004)
Constant	-0.0297	-0.0657	-0.2305**	-0.1489*	-0.0942	-		0.2070***	0.2224***	0.2074***
	(0.064)	(0.079)	(0.109)	(0.084)	(0.092)			(0.021)	(0.019)	(0.021)
Observations	4,995	3,511	2,010	3,444	3,257			15,196	20,193	15,206
R-squared	0.054	0.071	0.084	0.066	0.075			0.016	0.017	0.016

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

We estimate the following specification for the sample of customers *i* in each trial:

$$\text{switching}_i = \alpha + \beta \cdot \text{treatment} + \gamma_1 \cdot \text{age interval dummy}_{i,j} + \gamma_2 \cdot \text{age interval dummy}_{i,j} \cdot \text{treatment} + \gamma_3 \cdot \text{log gain interval dummy}_{i,j} + \gamma_4 \cdot \text{log gain interval dummy}_{i,j} \cdot \text{treatment} + \varepsilon_i$$

Table 9: Switching and effects of treatments by customer age and gains from switching band

	All switching, 4 weeks				
	(1)	(2)	(3)	(4)	(5)
VARIABLES	Front page switching box	Reverse switching box	Switching form	Digital reminder	SMS reminder
treatment dummy	**0.01299****	-0.00516	**0.06466****	0.02146	**0.02722*****
	(0.006)	(0.014)	(0.025)	(0.014)	(0.006)
*treatment * age 40-60 yrs*	-0.00254	0.00155	-0.00895	0.01752	-0.00642
	(0.006)	(0.016)	(0.028)	(0.018)	(0.007)
*treatment * age 60-80 yrs*	0.00816	-0.00191	0.03542	0.02790	-0.01605*
	(0.006)	(0.017)	(0.029)	(0.019)	(0.008)
*treatment * age >80 yrs*	**0.02655*****	-0.02578	0.01885	0.02532	0.00059
	(0.008)	(0.024)	(0.032)	(0.050)	(0.027)
*treatment * gains £50-100*	0.00545	0.02033	0.02128	0.01513	-0.00528
	(0.005)	(0.015)	(0.035)	(0.021)	(0.009)
*treatment * gains £100-500*	0.00372	0.01442	0.03719	-0.00308	**-0.02017*****
	(0.005)	(0.012)	(0.023)	(0.017)	(0.007)
*treatment * gains >£500*	0.00945	-0.00614	0.00437	-0.01091	-0.00323
	(0.012)	(0.024)	(0.054)	(0.025)	(0.011)
age 40-60 yrs	**-0.01710*****	**-0.03199****	0.00752	**0.13803*****	**-0.02835*****
	(0.005)	(0.014)	(0.012)	(0.014)	(0.005)
age 60-80 yrs	**-0.01282****	**-0.03642****	0.02325*	**0.25647*****	**-0.02303*****
	(0.005)	(0.015)	(0.013)	(0.015)	(0.007)
age >80 yrs	**-0.01220***	-0.01022	0.00228	**0.17382*****	**-0.04495*****
	(0.006)	(0.022)	(0.014)	(0.041)	(0.016)
ext gains £50-100	**-0.00767****	**-0.05526*****	**0.05196*****	**0.04195****	**-0.03170*****
	(0.004)	(0.013)	(0.019)	(0.018)	(0.007)
ext gains £100-500	-0.00225	**-0.06356*****	-0.00687	**0.06465*****	**-0.03555*****
	(0.004)	(0.011)	(0.009)	(0.014)	(0.005)
ext gains >£500	0.00107	**-0.04665****	0.03012	**0.17020*****	**-0.03154*****
	(0.010)	(0.022)	(0.031)	(0.020)	(0.008)
Constant	0.04061***	0.11826***	0.01217	0.21406***	**0.09271*****
	(0.005)	(0.012)	(0.011)	(0.011)	(0.005)
Observations	63,321	13,293	4,108	21,180	30,204
R-squared	0.004	0.012	0.040	0.062	0.014
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1					

Table 10 : share of accounts in each account age band by trial sample

	Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder
<1 year	0%	0%	0%	0%	3%
1-2 years	0%	1%	0%	100%	13%
2-5 years	30%	6%	0%	0%	25%
5-10 years	18%	93%	10%	0%	59%
>10 years	52%	0%	90%	0%	0%

We estimate the following specification for the sample of customers *i* in each trial:

$$\text{switching}_i = \alpha + \beta \cdot \text{treatment} + \gamma_1 \cdot \text{account age interval dummy}_{i,j} + \gamma_2 \cdot \text{account age interval dummy}_{i,j} \cdot \text{treatment} + \gamma_3 \cdot \text{log gain interval dummy}_{i,j} + \gamma_4 \cdot \text{log gain interval dummy}_{i,j} \cdot \text{treatment} + \varepsilon_i$$

Table 11: Switching and effects of treatments by account age

	Other switching, 4 weeks				
	(1)	(2)	(3)	(4)	(5)
VARIABLES	Front page switching box	Reverse switching box	Switching form	Digital reminder	SMS reminder
*treatment * account <1yrs old*				-	-0.0093
				-	(0.022)
*treatment * account 1-2yrs*				-	**0.0544****
				-	(0.024)
*treatment * account 2-5yrs*	**0.0224*****	0.0083		-	0.0315
	(0.004)	(0.019)		-	(0.023)
*treatment * account 5-10yrs*	-0.0063	-0.0137	0.0151	-	0.0331
	(0.006)	(0.020)	(0.025)	-	(0.022)
*treatment * account >10yrs*	-0.0078*		**0.0670*****	-	
	(0.004)		(0.025)	-	
*treatment * gains £50-100*	0.0073	0.0148	0.0324	-	-0.0068
	(0.005)	(0.015)	(0.035)	-	(0.009)
*treatment * gains £100-500*	0.0064	0.0098	**0.0562****	-	**-0.0226*****
	(0.005)	(0.012)	(0.024)	-	(0.007)
*treatment * gains >£500*	0.0114	-0.0111	0.0213	-	-0.0052
	(0.012)	(0.024)	(0.054)	-	(0.011)
account 1-2yrs				-	**-0.0520*****
				-	(0.018)
account 2-5yrs	(base)	(base)		-	**-0.0445****
				-	(0.017)
account 5-10yrs	0.0002	0.0302*	(base)	-	**-0.0648*****
	(0.005)	(0.017)		-	(0.017)
account >10yrs	**-0.0110*****		-0.0001	-	
	(0.003)		(0.013)	-	
ext gains £50-100	**-0.0088****	**-0.0568*****	**0.0516*****	-	**-0.0335*****
	(0.004)	(0.013)	(0.019)	-	(0.007)
ext gains £100-500	-0.0046	**-0.0668*****	-0.0067	-	**-0.0402*****
	(0.004)	(0.011)	(0.009)	-	(0.005)
ext gains >£500	-0.0033	**-0.0497****	0.0299	-	**-0.0390*****
	(0.010)	(0.022)	(0.031)	-	(0.008)
Constant	0.0343***	0.0671***	0.0247**	-	0.1385***
	(0.003)	(0.017)	(0.013)	-	(0.017)
Observations	63,381	13,302	4,126	21,180	30,205
R-squared	0.003	0.010	0.037		0.012
$\beta \cdot$ treatment group by trial	2-5yrs	2-5yrs	5-10yrs	-	<1yrs old
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1					

Table 12: Proportions of customers who held PCA

Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder
25%	75%	6%	77%	97%

We estimate the following specification for the sample of customers *i* in each trial:

$$\text{switching}_i = \alpha + \beta \cdot \text{treatment} + \gamma_1 \cdot \text{PCA dummy}_i + \gamma_2 \cdot \text{PCA dummy}_i \cdot \text{treatment} + \varepsilon_i$$

Table 13: Effects of treatments on All switching by holding of a PCA with the same bank

	All switching				
	Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder
VARIABLES	4 weeks	16 weeks	9 weeks	4 weeks	9 weeks
treatment	**0.0191*** **	-0.0001	**0.0815*** **	**0.0482*** **	0.0055
	(0.002)	(0.014)	(0.009)	(0.015)	(0.016)
holds PCA	**0.0116*** **	0.0208	-0.0102	**0.0645*** **	**0.0431*** **
	(0.004)	(0.015)	(0.018)	(0.014)	(0.013)
*treatment * holds PCA*	0.0024	0.0001	0.0315	-0.0144	0.0117
	(0.004)	(0.017)	(0.037)	(0.017)	(0.017)
Constant	0.0237***	0.1404***	0.0447***	0.3593***	0.0462***
	(0.002)	(0.013)	(0.005)	(0.012)	(0.013)
Observations	63,391	14,971	4,126	21,180	30,322
R-squared	0.002	0.001	0.022	0.003	0.001
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1					

Table 14: Effects of treatments on Other switching by holding of a PCA with the same bank

	Other switching				
	Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder
VARIABLES	4 weeks	16 weeks	9 weeks	4 weeks	9 weeks
treatment	**0.0030** **	-0.0149	0.0032	**0.0270*** **	0.0048
	(0.001)	(0.013)	(0.006)	(0.010)	(0.016)
holds PCA	**0.0098*** **	0.0012	-0.0046	-0.0031	**0.0431*** **
	(0.003)	(0.014)	(0.018)	(0.009)	(0.013)
treatment holds PCA*	0.0008	0.0141	0.0033	**-0.0266** **	0.0117
	(0.003)	(0.015)	(0.025)	(0.012)	(0.017)
Constant	0.0149***	0.1176***	0.0390***	0.1244***	0.0462***
	(0.001)	(0.012)	(0.004)	(0.008)	(0.013)
Observations	63,391	14,971	4,126	21,180	30,461
R-squared	0.001	0.000	0.000	0.001	0.001
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1					

We estimate the following specification for the sample of customers *i* in each trial:

$$switching_i = \alpha + \beta_k \cdot treatment_k + \varepsilon_i$$

Table 15: Average and individual treatment effects by trial

	All switching as proportion of total balance withdrawn in the group, in percentage points 4 weeks									
	All accounts					Accounts with no balance increase				
	Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder	Front page switching box	Reverse page switching box	Switching form	Digital reminder	SMS reminder
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
treatment 1	0.0027	-0.0049	**0.1061*** **	**0.0560** **	0.0255	-0.0040	0.0164	**0.1339*** **	**0.0591*** **	-0.0217
	(0.009)	(0.034)	(0.020)	(0.023)	(0.022)	(0.009)	(0.043)	(0.023)	(0.020)	(0.043)
treatment 2	**0.0329*** **	-0.0192		0.0238	**0.0525** **	**0.0515*** **	-0.0344		0.0324	0.0487
	(0.012)	(0.033)		(0.025)	(0.023)	(0.011)	(0.042)		(0.022)	(0.032)
treatment 3	**0.0262** **	-0.0152			0.0110	**0.0273** **	-0.0748*			0.0170
	(0.011)	(0.029)			(0.019)	(0.013)	(0.040)			(0.029)
treatment 4	**0.0432** **	-0.0003			**0.0689*** **	**0.0573** **	-0.0172			0.0534*
	(0.020)	(0.028)			(0.021)	(0.024)	(0.041)			(0.032)
Constant	0.0210***	0.0427*	0.0343***	0.5531***	0.0448***	0.0862***	0.2477***	0.0413***	0.7746***	0.3439***
	(0.008)	(0.023)	(0.010)	(0.017)	(0.011)	(0.008)	(0.032)	(0.011)	(0.017)	(0.015)
Observations	63,229	12,624	4,126	15,496	30,205	40,448	5,502	3,439	10,690	12,744
R-squared	0.000	0.000	0.036	0.001	0.000	0.009	0.011	0.051	0.005	0.006

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1. For trials 1, 2 and 5 effects are measured 4 weeks after the communication and for Trials 3 and 4 they are measured 4 weeks after rate decrease. Note: 72,635 accounts (58%) had no balance increase and 54,166 (42%) had a balance increase.

Annex 4: References

Adams, P., & Hunt, S. (2013). *Encouraging consumers to claim redress: evidence from a field trial*. Financial Conduct Authority.

Adams, P., Baker, R., Hunt, S., Kelly, D., & Nava, A. (2015) *Encouraging consumers to act at renewal. Evidence from field trials in the home and motor insurance markets*. Financial Conduct Authority.

Adams, P., Hunt, S., Vale, L., & Zaliauskas, R. (2015) *Stimulating interest: Reminding savers to act when rates decrease*. Financial Conduct Authority.

Agarwal, S., Chomsisengphet, S., Liu, C., & Souleles, N. S. (2015). Do consumers choose the right credit contracts?. *Review of Corporate Finance Studies*, cfv003.

Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2009). The age of reason: Financial decisions over the life-cycle with implications for regulation. *Available at SSRN 973790*.

Ater, I., & Landsman, V. (2013). Do Customers Learn from Experience? Evidence from Retail Banking. *Management Science*, 59(9), 2019-2035.

Ben-Shahar, O., & Schneider, C. E. (2014). *More than you wanted to know: The Failure of Mandated Disclosure*. Princeton University Press.

Bertrand, M., Karlan, D. S., Mullainathan, S., Shafir, E., & Zinman, J. (2010). What's advertising content worth? Evidence from a consumer credit marketing field experiment. *The quarterly journal of economics, 125*(1), 263-306.

Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: a typology, antecedents, and consequences. *Journal of the Academy of Marketing Science*, *31*(2), 109-126.

Calem, P. S., & Mester, L. J. (1995). Consumer behavior and the stickiness of credit-card interest rates. *The American Economic Review*, *85*(5), 1327-1336.

Calem, P. S., Gordy, M. B., & Mester, L. J. (2006). Switching costs and adverse selection in the market for credit cards: New evidence. *Journal of Banking & Finance*, *30*(6), 1653-1685.

Calvet, L. E., Campbell, J. Y., & Sodini, P. (2009). *Measuring the financial sophistication of households* (No. w14699). National Bureau of Economic Research.

Campbell, J. Y., Jackson, H. E., Madrian, B. C., & Tufano, P. (2011). Consumer financial protection. *The journal of economic perspectives: a journal of the American Economic Association*, *25*(1), 91.

Choi, J. J., Laibson, D., & Madrian, B. C. (2011). $100 bills on the sidewalk: Suboptimal investment in 401 (k) plans. *Review of Economics and Statistics*, *93*(3), 748-763.

DellaVigna, S. (2009). Psychology and economics: Evidence from the field. *Journal of Economic Literature, 47*(2), 315-372.

DellaVigna, S., & Malmendier, U. (2006). Paying not to go to the gym. *The American Economic Review*, 694-719.

Dranove, D., & Jin, G. Z. (2010). Quality disclosure and certification: Theory and practice. *Journal of Economic Literature, 48*(4), 935-963.

Duarte, F., & Hastings, J. S. (2012). *Fettered Consumers and Sophisticated Firms: Evidence from Mexico's Privatized Social Security Market* (No. w18582). National Bureau of Economic Research.

Ericson, K. M. M. (2012). *Consumer Inertia and Firm Pricing in the Medicare Part D Prescription Drug Insurance Exchange* (No. w18359). National Bureau of Economic Research.

Farrell, J., & Klemperer, P. (2007). Coordination and lock-in: Competition with switching costs and network effects. *Handbook of industrial organization*, *3*, 1967-2072.

Financial Conduct Authority (2015). *Cash savings market study report* . London.

Fox, C. R., & Tversky, A. (1995). Ambiguity aversion and comparative ignorance. *The quarterly journal of economics, 110*(3), 585-603.

Grubb, M. D. (2015). Failing to choose the best price: Theory, evidence, and policy. *Review of Industrial Organization*, *47*(3), 303-340.

Grubb, M. D., & Osborne, M. (2014). Cellular service demand: Biased beliefs, learning, and bill shock. *The American Economic Review, 105*(1), 234-271.

Haushofer, J. (2015). *The Cost of Keeping Track*. Working Paper.

Karlan, D., McConnell, M., Mullainathan, S., & Zinman, J. (2016). Getting to the top of mind: How reminders increase saving. *Management Science*.

Kiser, E. K. (2002). Predicting household switching behavior and switching costs at depository institutions. *Review of Industrial Organization*, *20*(4), 349-365.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5-44.

O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. *The American Economic Review*, 103-124.

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of risk and uncertainty*, *1*(1), 7-59.

Schwartz, B. (2004). The paradox of choice. New York: Ecco.

Sims, C. A. (2003). Implications of rational inattention. *Journal of Monetary Economics*, *50*(3), 665-690.

Sitzia S., Zheng, J., & Zizzo, D. (2015). Inattentive consumers in markets for services. *Theory and Decision*, 79(2), 307-332.

Stango, V., & Zinman, J. (2009). Exponential growth bias and household finance. *The Journal of Finance*, *64*(6), 2807-2849.

Tu, Y., & Soman, D. (2014). The categorization of time and its impact on task initiation. *Journal of Consumer Research*, *41*(3), 810-822.

25 The North Colonnade Canary Wharf
London E14 5HS
Telephone: +44 (0)20 7066 1000
Website: www.fca.org.uk