CAPCO JOURNAL

The Capco Institute Journal of Financial Transformation

Value dynamics

Disruptive forces reshaping financial services

Technological transformations

Sending out an SMS: How text alerts are transforming consumer finance

Michael D. Grubb
Jeroen Nieboer
Matthew Osborne
Jonathan Shaw

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JOURNAL

The Capco Institute Journal of Financial Transformation

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Welcome to the 61st edition of the Journal of Financial Transformation.

I am delighted to announce our new partnership with King's College London, a world-renowned leader in education and research, marking a new chapter in the Journal's long and distinguished history.

In this edition focusing on Value Dynamics, we explore a critical – and ever more pressing – challenge: how institutions across financial services create, distribute and sustain value.

As Professor Crawford Spence, our editor from King's College highlights in his own introduction, the forces shaping value dynamics across financial services are myriad, encompassing technological transformations, secular shifts, political and social structures.

As a firm that has been at the cutting edge of innovation for over 25 years, these value drivers intersect directly with the work Capco does every day, helping our clients around the globe transform their businesses for sustained growth.

The integration of innovative new technologies including generative and agentic AI models, the digitalization of currencies and payments infrastructures, the reimagining of customer experiences, the relentless evolution of market ecosystems, the vital role of culture as a value driver: these imperatives are where we see – first-hand – clear opportunities for our clients' future growth, competitive differentiation and success.

We are excited to share the perspectives and insights of many distinguished contributors drawn from across academia and the financial services industry, in addition to showcasing the practical experiences from Capco's industry, consulting, and technology SMEs.

It is an immense source of pride that Capco continues to champion a creative and entrepreneurial culture, one that draws on the deep domain and capability expertise of thousands of talented individuals around the world.

We do not take our hard-earned status as a trusted advisor lightly, nor our responsibility to make a genuine difference for our clients and customers every single day – placing excellence and integrity at the forefront of everything we do.

I hope the articles in this edition help guide your own organization's journey as you navigate the many complexities and opportunities ahead.

As ever, my greatest thanks and appreciation to our contributors, readers, clients, and teams.

Anne-Marie Rowland

Annie Rowland, Capco CEO

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Editor's note

This 61st edition of the Journal of Financial Transformation is the first with a new editorial team in place, and is the product of a formalized collaboration between Capco and King's College London. This collaboration – a leading financial services consultancy and a prestigious academic institution – embodies the Journal's ethos: a balance between academic rigor and practical accessibility.

Traditional academic journals often deal with more prosaic conceptual matters. Even when they focus on more practical concerns, the timelines and mechanics of double-blind peer review processes can mean that the insights that they offer risk being out of date by the time they are published. Conversely, traditional op-ed articles in the financial press are all too often heavy on opinion and pre-conceived ideas and can lack the heft that comes with thoroughly researched pieces of work.

The Journal we've published strikes a vital balance between these two approaches.

This edition has an overarching focus of Value Dynamics. Specifically, the various articles look at how value is created, distributed and sustained across financial services. In turn, the submissions are grouped into three broad themes.

Technological transformations are explored in terms of how these can bolster or hinder value dynamics if not managed effectively. A number of secular shifts are also discussed – these being long-term changes that are impacting value dynamics in the sector. Finally, structural challenges are highlighted that emphasize the importance of sticky, tricky social and behavioral issues that surround the execution of financial services.

Overall, these themes highlight challenges and opportunities in the sector and encourage us to think differently.

It has been a pleasure working on this issue with such a fantastic and diverse array of different contributors.

Professor Crawford Spence
King's College London

Sending out an SMS:
How text alerts are transforming consumer finance

Authors

Michael D. Grubb | Associate Professor of Economics, Boston College

Darragh Kelly | Data Scientist, Google

Jeroen Nieboer | Experiment and Machine Learning Platform Manager, Deliveroo

Matthew Osborne | Associate Professor of Marketing, University of Toronto

Jonathan Shaw | Technical Specialist, U.K. Financial Conduct Authority and Research Associate, Institute for Fiscal Studies

Abstract

Until recently, overdraft charges cost bank customers billions of pounds annually, disproportionately affecting a small share of heavy overdraft users. This paper summarizes Grubb et al.'s (2025) findings from large-scale field experiments at two major U.K. banks, showing that automatically enrolling customers into timely overdraft alerts significantly reduces charges. Just-in-time alerts cut unarranged overdraft charges by 17% to 19% and arranged overdraft charges by 4% to 8%. Required since 2019 for all customers at large U.K. banks, the alerts generate estimated annual consumer savings of £170 million to £240 million across the U.K. Most savings result from consumers transferring available funds rather than substantially changing their spending habits. While early-warning alerts also encouraged timely account checks and fund transfers, there were no statistically significantly savings beyond just-in-time alerts alone. While effective and broadly supported by consumers, automatic enrollment in alerts alone cannot entirely stop consumers from paying high overdraft charges unnecessarily. Consequently, regulators complemented automatic enrollment with reforms that simplified overdraft pricing starting in 2020, making borrowing costs clearer and comparable to credit card rates.

1. Introduction

Overdrafts are one of the most common forms of short-term borrowing, but they are also among the most expensive. Until recently, U.K. banks charged a mix of per-transaction, per-day, per-month, and interest-based fees, sometimes exceeding 10% in effective daily interest for unarranged overdrafts. In 2017, U.K. consumers paid an estimated £2.6 billion in overdraft and unpaid item fees, with more than half of these costs borne by just 5% of customers, many of whom were financially vulnerable [FCA (2018)].

For years, U.K. regulators have tried to reduce unnecessary overdraft fees, but most interventions had little to no effect. Research showed that many overdraft users had sufficient funds available in savings or lower-cost credit card accounts, yet still incurred fees [Stango and Zinman (2009), FCA

(2018)]. A major reason? Inattention – customers simply weren't aware they were overdrawing their accounts [CMA (2016)].

To address the problem, under the auspices of the FCA, we worked with two major U.K. banks to test a simple but powerful solution: automatic text alerts. This article summarizes our results and was adapted from our earlier publication [Grubb et al. (2025)]. Text alerts had been available on an opt-in basis at all major U.K. banks since 2012. But now, instead of requiring customers to opt-in, these banks automatically enrolled a random sample of customers in overdraft alerts. The experiments, run in 2017 and 2018, included a combined sample of 1.1 million banking customers. They automatically enrolled current (checking) account customers in a variety of "just-in-time" alerts, triggered by entry into overdraft or when a pending transaction is poised to be declined, and "early warning" alerts, triggered by low balances before the overdraft threshold.

Each alert was designed to warn of either a declined transaction called an unpaid item (UI) or one of the two types of overdraft facilities offered in the U.K.: arranged and unarranged. An **arranged overdraft (AOD) facility** is a line of credit with a borrowing limit pre-agreed between bank and consumer, equal to £1,000 on average for the two collaborating banks, which consumers automatically use when their current account balance drops below zero. An **unarranged overdraft (UOD)** facility is used when a bank approves a transaction that takes the consumer past their AOD limit or, if they do not have an AOD, below zero. These experiments were complemented by a follow-up survey in which we directly asked customers whether they found the alerts helpful.

The results are striking. After automatic enrollment in just-in-time alerts:

- Unarranged overdraft and unpaid item fees fell by 17-19%.
- Arranged overdraft fees fell by 4-8%.
- The estimated annual consumer savings across the U.K. market was £170-240 million.
- Alerts eliminated less than half of consumers' overdraft "mistakes."

Our findings encouraged two policy shifts: in 2019, based on the benefits of alerts, U.K. regulators expanded the requirement for automatic enrollment, and in 2020, based on the limitations of alerts, they restructured overdraft pricing, making fees more transparent and comparable to credit card rates. The following sections explain the history behind overdraft alerts, the automatic enrollment experiments, the effectiveness of alerts, why alerts work, how customers respond, and resulting implications for policy.

2. The search for an effective nudge

U.K. regulators have long struggled to keep overdraft charges in check without restricting consumer access to short-term borrowing. Overdraft charges are often far higher than those for other forms of credit, with markups three times those of credit cards after adjusting for the risk of default [FCA (2018)]. However, strict fee caps could make high-risk overdraft loans unprofitable and lead banks to restrict overdraft access, potentially harming customers who genuinely need it. Instead of strict price controls, U.K. regulators sought a behavioral "nudge" – a way to encourage consumers to manage overdrafts more effectively without disrupting credit availability. Unfortunately, their first two attempts failed:

1. Annual Fee Summaries (2008): Major U.K. banks agreed to send customers yearly account statements detailing overdraft fees. The result? Zero impact – likely because customers need real-time actionable information, not a once-a-year report [Hunt et al. (2015)].

2. Opt-In Overdraft Alerts (2012): Banks were required to offer text alerts for overdrafts and low balances. The problem? Fewer than 10% of customers enrolled, with some banks seeing sign-up rates as low as 1% [Caflisch et al. (2018)].

Hoping that increasing participation would make text alerts a success, the CMA tried again – this time, flipping the system from opt-in to opt-out. Instead of waiting for customers to sign up, banks were required to automatically enroll them in key alerts by early 2018.

Would this new approach work? The hope came from research by Hunt et al. (2015) showing that UOD charges fell by an average of 5% to 8% after consumers signed themselves up for alerts. However, the evidence was not conclusive that the alerts themselves drove the savings. Because consumers often enrolled in alerts after experiencing costly overdrafts, they might simultaneously adopt other strategies – like tighter budgeting or larger buffer savings – to prevent future charges. This made it impossible to tell whether alerts alone were responsible for the observed fee reductions. Getting to the bottom of this question motivated the large-scale randomized field experiments that followed.

3. The experiment: automatic enrollment in overdraft alerts

Would automatically enrolling customers in overdraft alerts actually help them avoid charges? And if so, which alerts would be most effective and who would benefit most? To find out, we conducted a series of randomized field experiments between 2017 and 2018 in collaboration with two of the U.K.'s six major banks. These banks serve a broad cross section of consumers, broadly representative of the overall market, and included a combined total of 1.1 million customers in the experiment.

The study was structured to test the effectiveness of two primary types of alerts:

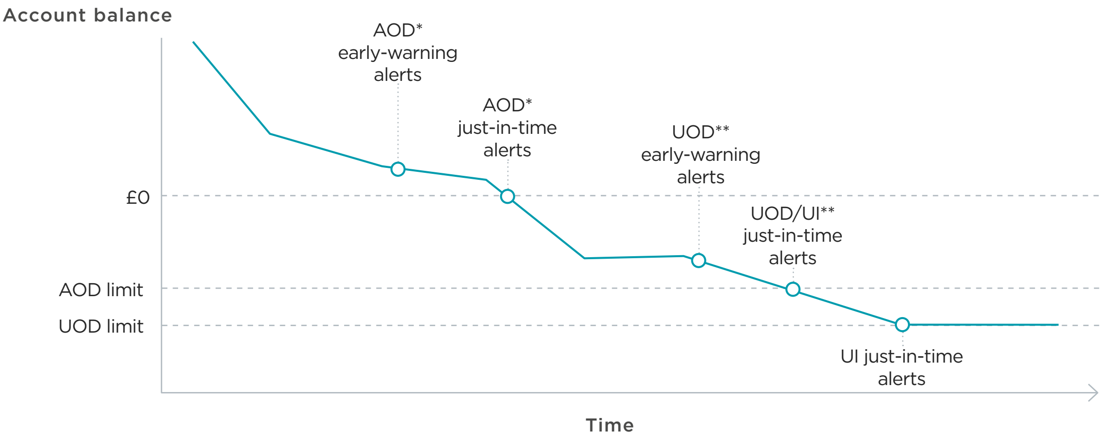
1. **Just-in-time alerts:** These alerts were sent immediately when a customer entered an overdraft or when a transaction was about to be declined. An existing same-day grace period let consumers avoid charges by restoring a positive balance by the end of the day (making these alerts "just-in-time" rather than "just-too-late").

2. **Early-warning alerts:** These alerts were sent before an overdraft, when a customer's balance fell below a threshold of £50 or £100, offering an opportunity to take preventive action, such as reducing spending or shifting spending to a credit card.

For a hypothetical consumer who has AOD and UOD facilities and is enrolled in all alerts, Figure 1 illustrates when just-in-time and early-warning alerts are sent as the consumer's account balance decreases. We say that the alert labeled "UOD/UI early warning" provides early warning for UI in addition to UOD because extension of credit through a UOD facility is at the bank's discretion and is typically limited – meaning that any account on the verge of incurring UOD charges is also on the verge of incurring UI charges.

In each trial, customers were randomly assigned to a control group, with no change in policy, or to a treatment group, in which customers were automatically enrolled in one or more alerts. Randomizing customers into alert groups allowed us to confidently determine the effectiveness of the alerts without confounding factors. Treatments were designed so that we could measure the effect of different alert timings (receiving alerts just-in-time, with early warning, or both), and measure the effect of alerts warning of different events (AOD, UOD, or UI). Finally, our last treatment did not automatically enroll customers in alerts, but rather emailed them encouraging them to self-enroll.

Figure 1: Illustration of balance thresholds at which alerts are sent



Note: Acronyms: arranged overdraft (AOD), unarranged overdraft (UOD), and unpaid item (UI). The AOD limit is pre-agreed between bank and consumer, whereas the UOD limit is unknown to the consumer. * = If the consumer does not have an AOD facility, this will be a UOD/UI alert. ** = If the consumer does not have a UOD facility, this will be a UI alert.

Alerts were sent with the same message text banks already incorporated in the alerts they offered on an opt-in basis, ensuring our results correspond to the actual messages banks send. Representative message text from each bank (which we refer to as banks A and B) are shown in Table 1.

Banks provided us with all current account transaction data for customers in the experiment over an eleven-month period, six months leading up to the intervention, and five months following automatic enrollment in the alerts. Key metrics include:

- Opt-out rates from the alert system
- Frequency and duration of overdrafts and resulting OD fees
- Frequency of declined transactions and resulting UI fees
- Frequency of logins, spending, and account transfers following alerts.

Table 1: Representative alert message text

No.	Type	Target	Bank	Representative text
1	just-in-time	AOD	A	You are now using your overdraft and may incur charges
2	just-in-time	AOD	B	Your balance is now below £0
3	just-in-time	UOD	B	You are now using your unarranged overdraft. Transfer funds before cut-off to avoid charges
4	just-in-time	UI	B	A scheduled payment will go unpaid. Transfer funds before cut-off to avoid charges
5	early warning	AOD/UOD/UI	A/B	Your balance is now below £X (For X= 100 or 50)
6	early warning	UOD/UI	B	You are approaching your arranged overdraft limit

Note: This table reports representative text of alerts tested in our experiments. Exact text cannot be reproduced to protect bank anonymity. The bank's name appears as the sender of each text message, so recipients recognize alerts as coming from their bank. Acronyms: arranged overdraft (AOD), unarranged overdraft (UOD), and unpaid item (UI).

Finally, after the experiment, a survey directly asked a sample of customers in the study about their experiences with alerts.

4. Results

4.1. Opt-out enrollment dramatically boosts participation

Default settings strongly influence consumer decisions, and automatic enrollment in overdraft alerts is no exception. Previously, when consumers had to actively opt-in, enrollment rates across the six major banks were extremely low – at most 8% [Caflisch et al. (2018)].[1] By contrast, fewer than 10% of consumers opted out after being automatically enrolled during our experiment, increasing enrollment by over 90 percentage points at both banks. Even when opting out was made extremely easy (requiring only a reply to a notification text), most consumers remained enrolled. In stark contrast, a separate trial encouraging voluntary enrollment via email achieved less than one-tenth of this effect, raising enrollment rates by fewer than nine percentage points.

4.2. Just-in-time alerts substantially reduce overdraft fees

Our experiments clearly demonstrate that just-in-time alerts help consumers save money by reducing overdraft charges. We find that these alerts reduce AOD charges by 4% to 8% and reduce UOD and UI charges by 17% to 19%. (We provide ranges of estimates because results vary by bank and treatment group.) When scaled up to the entire U.K. market using total 2017 charges as a baseline, this implies potential consumer savings between £170 million and £240 million annually.

The impact of early-warning alerts is less clear. When used instead of just-in-time alerts, early-warning alerts appear somewhat less effective, but we cannot rule out comparable benefits. When used alongside just-in-time alerts, our results suggest a modest additional benefit, but this was statistically inconclusive – even with a large sample of 1.1 million customers.

Based on these findings, in 2019 the FCA expanded the CMA's existing policy mandate for automatic enrollment into just-in-time alerts to include all overdrafts (arranged as well as unarranged) and to cover more banks (by reducing the size threshold for which the policy applies). In addition, they decided against mandating automatic enrollment in early warning alerts [FCA (2018)].

4.3. Alerts prompt consumers to check accounts and transfer funds

Text alerts help consumers avoid overdraft charges primarily by prompting immediate action. Our analysis uses three data sources – login activity, survey responses, and detailed account transactions – to understand precisely how consumers respond.

Login data reveal that alerts prompt consumers to actively check their accounts. On average, every ten just-in-time alerts trigger about five additional customer logins.

What do consumers do after checking their accounts? Survey responses indicate that 61%–73% take additional action. Most consumers respond by transferring money from savings accounts (50%–64%), borrowing informally from family or friends (25%–43%), or reducing spending (31%–48%). Far fewer delay bill payments (8%–24%), used credit cards (2%–7%), or borrowed from other formal sources (0%–7%).

Detailed transaction data support these survey responses, but emphasize the importance of fund transfers over spending reductions. Each

[1] Personal experience of one coauthor at two of the major banks indicates opting-in was difficult, involving locating a hard-to-find setting online without an in-person or telephone option.

just-in-time alert prompted an average increase in transfers of £126 per event, with roughly one-quarter of alerts triggering a transfer averaging £465. In contrast, the average reduction in spending per alert was minimal – around £4. Thus, most savings resulted from consumers leveraging available liquidity rather than significantly altering their spending patterns.

We hoped early warning alerts would give consumers more time to cut spending (or shift it to a credit card), giving even those without available funds for transfer an alternative way to avoid overdraft charges. Early-warning alerts did conclusively prompt consumers to log into their accounts and make transfers earlier. Unfortunately, while some evidence is suggestive of additional reductions in spending or overdraft charges compared to just-in-time alerts alone, none is statistically conclusive.

One possible reason for the underwhelming impact of early warning alerts is that sending alerts £50 to £100 before an overdraft often translated into only one or two days of warning time. Unfortunately, while raising low balance thresholds would give more advanced warning, it would likely also dilute alert effectiveness by creating too many "false alarms." In the future, early warnings may be more effective if artificial intelligence can be used to forecast overdraft risk earlier and more precisely than a simple low balance threshold.

4.4. Consumer benefits are broadly shared

An essential question for policymakers is whether overdraft alerts benefit vulnerable groups, including heavy overdraft users and low-income customers. A concern is that alerts will benefit these groups little because they have limited available cash to transfer into an overdrawn account or are already aware of their balances.

On the contrary, however, we found that alerts provided substantial benefits across all customer segments studied – including both frequent and infrequent overdraft users and those with high and low incomes. Benefits were notably larger for customers with a history of:

- frequent overdrafting
- low average balances
- near-overdraft experiences ("close calls")
- infrequent account logins (low account engagement).

These groups benefit most because they are at greater risk of overdrafting or because they find alerts particularly informative, given their lower initial account engagement.

4.5. Consumers appreciate automatic alerts

Following the field experiment, the FCA employed a market research firm to conduct a 10 to 15 minute telephone survey with 2,000 trial participants from each bank. We asked consumers about their attitude towards alerts. Of the small minority who opted out of alerts, roughly half (40% to 58%) did so primarily because the alerts were "not useful" or "not needed," with a smaller share (27% to 40%) opting out to avoid some psychological discomfort (such as irritation, anxiety, or embarrassment).

A possible downside of automatic enrollment is that it could unintentionally irritate consumers who do not like alerts but find it too much of a hassle to opt out. Fortunately, among customers who remained enrolled, the vast majority were positive about the alerts: 54%–64% liked receiving them, 84%–92% found them helpful, and only a small minority (3%–8%) disliked them. Most respondents (87%–91%) felt the frequency of alerts was "about right," while only 2% to

5% reported receiving alerts "too often." Finally, 69%–81% agreed that automatic enrollment was best, although 20%–28% would have preferred a choice to enroll voluntarily.

4.6. Alerts are not a panacea

The fact that just-in-time alerts could reduce overdraft borrowing charges by £170 million to £240 million shows that, in the absence of alerts, a substantial portion of overdraft borrowing is unintentional due to lack of awareness about account balances. Unfortunately, although highly effective at reducing this problem, alerts do not resolve all the problems with overdraft borrowing.

In 2016, prior to alert auto-enrollment policies, the FCA (2018, Technical Annex Chapter 5, Table 1) estimated that more than half of days in overdraft could have been avoided if consumers used their savings or shifted spending to their credit cards – which notably had much lower effective interest rates. Automatic enrollment in just-in-time alerts eliminated fewer than half of these avoidable overdrafts, shrinking days in arranged overdrafts by 4%-9% and days in unarranged overdrafts by 15%-21%. Thus, despite their large benefits, alerts cannot entirely eliminate consumers' financial management challenges leading to unnecessary overdrafts.

5. Policy implications and regulatory changes

Based on our headline prediction of £170–240 million in consumer savings from automatic enrollment in just-in-time alerts, in 2019 the FCA expanded the CMA's 2018 opt-out mandate for just-in-time UOD and UI alerts to cover more banks (by reducing the size threshold for which the regulation applies) and added a mandate for just-in-time AOD alerts. Based on our failure to find statistically detectable benefits from additional early warning alerts, the FCA let banks continue to offer early-warning alerts on an opt-in basis [FCA (2018)].

Moreover, our finding that alerts are not a panacea for all overdraft borrowing "mistakes" encouraged the FCA to enact additional regulations effective in 2020. Historically, overdraft charges in the U.K. were complex and difficult to compare. Banks used a mix of per-day, per-month, per-transaction, and interest-rate based charges, making it challenging for consumers to understand how much they were paying for overdraft borrowing. This may be why consumers rarely shifted their current account spending to their credit cards after receiving early warning alerts – they didn't realize credit card interest charges would be cheaper than the corresponding overdraft charges. The FCA responded by requiring banks to structure overdraft charges as a simple interest rate, and encouraged them to disclose the interest rate to consumers in the same format as credit card interest rates (as an effective annual rate or EAR) [FCA (2019)].

The FCA's new overdraft pricing reform reflects smart policy making. The reform avoids capping charges in a way that could inadvertently restrict credit. Instead, by making the overdraft borrowing costs easily comparable both across banks and with credit cards, it harnesses consumer comparison shopping and the forces of market competition to limit overdraft charges. Prior to the policy, effective daily interest rates on overdraft borrowing regularly exceeded 10% per day [FCA (2018)]. After implementation of the new rule, large banks began charging dramatically lower effective interest rates – in 2023 the largest six banks all offered overdraft ERAs below 40%. It is now easier for consumers to recognize that their credit cards offer lower-cost credit, and is less costly when they don't.

Since the FCA's 2019 opt-out mandates for alerts were implemented, consumer adoption of mobile banking apps has continued to grow – from 63% in 2019 to 73% in 2024.[2] Because the FCA allows banks to deliver mobile app push alerts instead of SMS text alerts if customers have the app installed [FCA (2025, Section 8.4.8])], this trend increasingly positions push notifications as an important channel for just-in-time alerts. This shift offers several potential benefits, including lower messaging costs for banks, improved consumer responsiveness to alerts, and a reduced risk of fraud, as push alerts may be harder to spoof compared to SMS messages.[3] Nevertheless, even as digital channels evolve, the ongoing necessity of the FCA's alert mandate remains clear. Santander's recent decision to cease sending five non-mandated text alerts (low balance, high balance, high deposit, high withdrawal, and weekly summary) starting May 12, 2025,[4] clearly demonstrates the limitations of relying solely on voluntary bank practices and consumer opt-in, underscoring the enduring importance of regulatory oversight.

Our experimental tests of alerts do not reveal if or how banks might try to recoup lower overdraft revenue by raising charges for other products or services. Nevertheless, we are optimistic that U.K. retail banks will respond similarly to U.S. retail banks, which did not adjust prices to offset 2009 CARD Act reductions in hidden credit card charges [Agarwal et al. (2015)]. Investigating whether our optimism is borne out in practice is left for future work.

References

Agarwal, S., S. Chomsisengphet, N. Mahoney and J. Stroebel, 2015. "Regulating Consumer Financial Products: Evidence from Credit Cards," Quarterly Journal of Economics 130: 1, 111–164

Caflisch, A., M.D. Grubb, D. Kelly, J. Nieboer and M. Osborne, 2018. "Sending out an SMS: The Impact of Automatically Enrolling Consumers into Overdraft Alerts," Financial Conduct Authority Occasional Paper No. 36, https://tinyurl.com/7ks9hfny

Competition and Markets Authority (CMA), 2016. "Retail Banking Market Investigation, Final Report," August, https://tinyurl.com/5ys8wrm6

Financial Conduct Authority (FCA), 2018. "High-Cost Credit Review: Overdrafts Consultation Paper and Policy Statement," consultation paper CP18/42, https://tinyurl.com/37bkb9yz

Financial Conduct Authority (FCA), 2019. "High-Cost Credit Review: Overdrafts Policy Statement," policy statement PS19/16, June, https://tinyurl.com/3j5kdhje

Financial Conduct Authority (FCA), 2025. "Banking: Conduct of Business Sourcebook," https://tinyurl.com/mfz8m5v4

Grubb, M.D., D. Kelly, J. Nieboer, M. Osborne and J. Shaw, 2025. "Sending Out an SMS: Automatic Enrollment Experiments for Overdraft Alerts," The Journal of Finance, 80: 1, 467–514

Hunt, S., D. Kelly and F. Garavito, 2015. "Message Received? The Impact of Annual Summaries, Text Alerts and Mobile Apps on Consumer Banking Behaviour," Financial Conduct Authority Occasional Paper No. 10, https://tinyurl.com/z272dtph

Stango, V, and J. Zinman, 2009. "What Do Consumers Really Pay on Their Checking and Credit Card Accounts? Explicit, Implicit, and Avoidable Costs," American Economic Review: Papers and Proceedings, 99:2, 424–429

[2] https://www.statista.com/statistics/1395159/mobile-banking-penetration-in-the-uk/
[3] https://www.ic3.gov/PSA/2022/PSA220414
[4] https://www.santander.co.uk/personal/support/understanding-our-services/account-alerts

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