Messages Committing You to Reciprocate:
A Field Experiment With “Contactless” Debtors

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ABSTRACT
The article presents the results of a field experiment that uses ‘nudge’ type influences as the content of text messages targeting a specific group of debtors of one of the fast loans companies operating in Bulgaria. This is a group consisting of so-called ‘contactless’ clients, the ones that stop paying their instalments and cut all the communication with their creditor during the COVID-19 isolation phase. The authors define the term ‘nudge’ and also explain the differences between the traditional debt collection process and the behavioural approach to collection. They reveal the impact of nudging SMS messages that make debtors feel committed to reciprocate, which is a specific automatic effect on the decision-making process. Those text messages significantly increased the probability of the debtors responding to the invitation for credit restructuring compared to when the standard message was sent. Therefore, it is important to implement new behavioural approaches in existing debt collection strategies in the context of the new social reality created by the COVID-19 pandemic.

KEYWORDS
Behaviour Change, Debt Collection, Nudging

INTRODUCTION
The topic of debt collection will always be important for any financial institution. During recent years, behavioural science, and especially nudge theory (Thaler & Sunstein, 2008), provide some insights about how to approach clients refusing to pay, or pay less or with significant delays. Many authors report some real breakthroughs and show substantial evidence of improved collection (see Hallsworth, List, Metcalfe, & Vlaev, 2017). However, the recent events related with COVID-19 have once again brought to the table the issue of indebtedness as a social, rather than personal phenomenon. Of course, in such context, the usage of more traditional collection strategies stressing on penalty interests and additional taxes may not be appropriate. Due to temporary law regulations, but also because of the ethical aspects, communication with debtors should be changed as a result of the pandemic crisis. This is why many financial institutions need different approaches. This article aims to address such issues as well as provide some ideas based on the implementation of nudge theory in practice.

The purpose of the reported study was to provide new behavioural approaches in debt collection strategies in the context of the new social reality created by the COVID-19 pandemics. There is certainly a gap in the literature on debt collection and repayment, specifically in the context of social
and financial crises caused by government restrictions during pandemics. We are not aware of field experiments or interventions which test the effectiveness of new debt collection strategies in such context (Amit et al., 2020). Therefore, our specific objectives are two. First objective is to show the beneficial impact of using SMS messages designed according to behavioural science principles, compared to a standard message, when targeting debtors who stopped paying their instalments during the COVID-19 lockdown phase. In this context, a beneficial impact is understood in terms of an increased rate of response to an invitation for credit restructuring. Second objective is testing the beneficial impact of specific behavioural science messages that provoke debtors to feel committed to reciprocate, which is a specific automatic effect on the decision-making process. Our results revealed that those text messages significantly increased the likelihood of the debtors responding to the invitation for credit restructuring, compared to when the standard message was sent.

**BEHAVIOURAL INSIGHTS IN THE COLLECTION PROCESS**

There are two main approaches to ensuring public compliance with rules and laws, including debt repayment, namely the deterrence approach and non-deterrence perspective (Alm, 2012; Almenberg, Lusardi, Säve-Söderbergh, & Vestman, 2018; Hallsworth et al., 2017). The deterrence strategy which assumes individuals are rational and concerned only with advancing their private interests. In the case of compliance with debt repayments, this approach assumes that a person’s decision whether to evade paying is based on considering the probability of being caught and the size of fine. Accordingly, compliance policies must focus on vigilant monitoring, the threat of sanctions and penalties, and removing opportunities for non-compliance. This traditional collection process is well known in any financial institution. It is a process that relies on information and decision making taken by a so-called conscious or rational cognitive system (Vlaev & Dolan, 2015). Generally, that process is based on the notion that information about costs (penalties and taxes) is crucial, and that the more information reaches the debtor, the more likely he or she will pay. The presumption is that certain information will lead to a decision based on logic alone.

On the other hand, there is no secret, that the findings made by behavioural science, revealed some shortcomings of the traditional collection process. The non-deterrence approach claims that the compliance decision does not rest solely on benefits to the individual, but rather is influenced by psychological factors such as societal norms, ethical concerns, and perceptions of fairness, which are often considered innate and instinctive human needs (Kirchler, 2007). The debt collector is responsible for supporting the individual’s primary disposition to comply, by giving helpful information, fair treatment and making compliance easy. This is a behavioural approach to compliance which uses stimuli that activate different, often unconscious, decision-making process, which is known as the ‘automatic system’. This decision process is not based on logic, but is motivated by emotions, context and mental shortcuts known as heuristics (Glimcher, Camerer, Fehr, & Poldrak, 2009; O’Keefe, 2012; Jamilakhon, Singh, Suppramaniam, & Subramaniam, 2020; John, Smith, & Stoker, 2009; Dimitrov & Vlaev, 2015). This type of stimuli is often called ‘nudges’ (Vlaev & Dolan, 2015).

Being the most popular concept, created within the boundaries of behavioural science, nudge theory no longer needs a detailed presentation. The theory gained popularity through the work of Richard Thaler and Cass Sunstein (Thaler & Sunstein, 2008) and is based on the idea of choice architecture - the design of different ways in which choices can be presented and the impact of that presentation on consumer decision-making. Regardless of the fact that some important discoveries in that field have been made far before their work, and can be traced back to the work of authors such as Eliot Aronson (Aronson, E. 1995), Robert Cialdini (Cialdini, 1998) and Robert Shiller (Shiller, 2000), Thaler and Sunstein really put the concept of choice architecture together, and in addition to that, they come up with the catchy term NUDGE. As the authors described it, a nudge is: ‘… any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options or significantly changing their economic incentives.” (Thaler & Sunstein, 2008, p. 6).
As a result of the collective effort made by different authors after the work of Thaler and Sunstein, behaviour change theory became even more practical exploring and testing different mental heuristics and influences on behaviour (Ariely, 2008; Brown, 2012; Hausman & Welch, 2010; Fellner et al., 2013; Legett, 2014; Michie & West, 2013). Nudges are also described by frameworks developed in the behavioural economics literature. In particular, the prominent MINDSPACE framework is an acronym that gathers up the most robust behavioural effects on automatic motivations: the concepts Messenger, Incentives, Norms, Defaults, Salience, Priming, Affect, Commitments, Ego (Dolan et al., 2012a; 2012b). Table 1 presents the definitions of those influences.

We used the Commitment effect, and specifically our strong instinct for reciprocity, which is linked to a desire for fairness, because the debtors in our study were offered the opportunity to restructure payment plans, to renegotiate the amount of their contribution – a kind gesture that, we expected, is likely to trigger customers’ desire to reciprocate.

There is evidence showing that kind public requests are perceived more favourably, and individuals feel inclined to reciprocate kindness and fairness (Cialdini, 1998). In the context of debt collection, a recent trial (field experiment) which presented debtors with easy-to-comprehend and respectful information, rather than economic threats (Jensen, Nielsen, & Rasmussen, 2018). For example, in order to make the reminder notice ‘kind’, the notice was addressed to “Dear FIRST NAME”, there was a personal sender to the notice with a signature, the notice started with “Oops, it seems you forgot to pay for day care in May” that aimed at setting a forgiving (rather than a threatening) tone, and the headline was “Thank you” (instead of “Thank you for paying”). This nudge aimed at inducing reciprocal tendencies in recipients did indeed elicit significantly higher voluntary debt payments compared to the standard reminder notice. Similar kindness-related strategies were utilised by the

<table>
<thead>
<tr>
<th>Table 1. The MINDSPACE framework describes the most robust effects on automatic motivations</th>
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<tbody>
<tr>
<td><strong>Messenger:</strong> we are heavily influenced by who communicates information. We are affected by the perceived authority of the messenger (whether formal or informal). Demographic and behavioural similarities between the expert and the recipient can improve the effectiveness of the intervention.</td>
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<td><strong>Incentives:</strong> our evaluations of outcomes and responses to incentives are shaped by mental biases such as strongly avoiding losses, overweighting small probabilities (hence why lotteries may act as a powerful motivation), mental accounting (we tend to allocate different rewards/payoffs to discrete mental accounts), and present bias (we prefer more immediate rewards).</td>
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<td><strong>Norms:</strong> we are strongly influenced by what others do. People often take their understanding of social norms from the behaviour of others. Relate the norm to your target audience as much as possible and consider social networks.</td>
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<td><strong>Defaults:</strong> we “go with the flow” of pre-set options. Many decisions we take every day have a default option, whether we recognise it or not. Defaults are the options that are pre-selected if an individual does not make an active choice.</td>
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<tr>
<td><strong>Salience:</strong> our attention is drawn to what is novel and seems relevant to us. Our behaviour is greatly influenced by what our attention is drawn to. People are more likely to register stimuli that are novel, accessible, simple, and relevant.</td>
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<td><strong>Priming:</strong> our acts are often sub-consciously influenced by cues that activate (prime) concepts in our memory. Priming often occurs when external, situational cues activate a goal, which affects information processing and behaviour in an attempt to achieve the primed goal representation. People’s subsequent behaviour may be altered if they are first exposed to certain sights, words or sensations.</td>
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<td><strong>Affect:</strong> our emotional associations can powerfully shape our actions. Emotional responses to words, images and events can be very rapid and automatic.</td>
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<td><strong>Commitments:</strong> we seek to be consistent with our public promises, and to reciprocate acts. People use commitment devices to achieve long-term goals. One common commitment device is to make commitments public, since breaking the commitment will lead to significant reputational damage. Creating an action-plan which specifies who needs to do what, when and where is also a commitment device. A final aspect of commitment is our strong instinct for reciprocity, which is linked to a desire for fairness.</td>
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<td><strong>Ego:</strong> we act in ways that make us feel better about ourselves. We tend to behave in a way that supports the impression of a positive and consistent self-image.</td>
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first trial showing that SMS reminders increase payment of delinquent fines - text messages were especially effective when they address the recipient by name (Haynes et al., 2013).

Being kind in the way you address a debtor in communications is only one type of nudging strategy to trigger reciprocity. Another reciprocity-inducing strategy involves actually doing something helpful for a person; for example, by making things easier for debtors to repay, which may be perceived as only fair given the circumstances during the pandemic. Therefore, it is also important to explain and justify, i.e. give a reason, why such an offer is made, which should reinforce the perceived fairness of the offer (e.g., because the customer is understood and valued). To achieve such an effect, we used messages such as “You are valuable to us, so we support you now. In view of the state of emergency, our company wants to ease the conditions for repaying your debts.” This message signals understanding and support, which aimed to elicit personal Commitment to reciprocate. This behaviour change strategy reported here has not been tested so far in the context of debt collection.

There is also a more general gap in the literature on debt collection and repayment, specifically in the context of social and financial crises caused by government restrictions during pandemics. We are not aware of field experiments or interventions which test the effectiveness of new debt collection strategies in such context.

A CHANGE IN DEBTORS’ BEHAVIOURS IN THE ‘FAST LOANS’ SECTOR – A PREMISE FOR NUDGE TYPE INTERVENTIONS

The COVID – 19 crisis, and especially the lockdown and social distancing measures, have caused numerous inconveniences for the consumers of financial services, such as physical distance from the pay desks and cash registers due to inability to meet in person to discuss loans, difficulties to pay or receive money online and other changes in consumers’ interaction with financial services. This trend was accompanied by other more unpleasant effects such as reduction of working hours and income, in some cases even temporary unpaid leave or job loss. All these factors have led to a dramatic decline in paid instalments, which has affected many financial institutions (Arellano, Bai & Mihalache, 2020).

Those difficulties were most pronounced in the ‘fast loans’ sector, specifically in middle income countries such as Bulgaria. By 2020 this financial sector in Bulgaria included more than ten companies, which hold more than 18% market share of the loan services. During the lockdown period, which lasted more than two months, one of these companies (for confidentiality reason we will use the name ‘Company $’), had reported more than an 80% decline in the collectability of its receivables. This was due to the enormous drop-down of the size of payments or lack of payments at all. Against the background of the other clients, one particular group was standing out, creating concerns. That was the group of the so-called ‘contactless clients’. Normally this group has consisted of a very small number of clients that had not paid their fees for more than 60 days and also cut all communication with Company $. For only two months this group increased in size more than ten times.

METHODOLOGY

Normally Company $ had between 50 and 100 contactless debtors and was managing to keep that number low by the use of credit restructuring, out of court recovery proceedings, mobile collectors, etc. These approaches worked well, minimizing losses for the clients and for the company as well. However, during the COVID – 19 self-isolation phase the number of these clients increased to 582, and the management of Company $ was worried and decided to reach out to those debtors.

For contactless debtors from this period, the distribution of women and men was 214 women and 368 men. Age was men between 18 and 61 (average age 30) and women between 18 and 55 (mean age 29). The average loan amount per debtor is (approximately) BGN 1,900 (there are also those with BGN 900. There are also those with BGN 3000). The total amount that the debtors have
taken is BGN 1,106,032.8. Payback time offered is between 6 and 18 months, and the average for the group was approximately 11.4 months.

The debt collection process implements the following procedure:

- Date of payment due date - a reminder sms.
- 3 days overdue - sms informing that the due date was 3 days ago.
- 7 days overdue - sms reminding with notification that penal clauses are activated (interest and fees).
- 14 days overdue - sending an email demanding payment and notifying that the penalty interest rates have already been activated.
- 28 days overdue - sms with payment reminder, and information on penalty interest / fees.
- 30 days overdue - call from call center.
- 45 days overdue - sms (as on day 28).
- 60 days overdue - call from call center.
- 70 days overdue - call from call center, email and paper letter sent by mail. All channels say that if they do not pay within 7 days, the debt becomes due in full in advance (that is, Company $ no longer ask the debtor only for the two missed installments, but also everything that is due to the creditor).
- 90 days overdue - the loan becomes due ahead of time and an enforcement case is filed in court.

The contactless clients were those debtors who have not responded after the ‘60 days overdue’ (i.e. these clients had stopped all lines of communication - they did not answer calls, sms or e-mails). Only for this trial, instead of activating the procedure for the ‘70 days overdue’ stage, the contactless clients were provided with an opportunity to restructure payment plans, to renegotiate the amount of their contribution, and to activate a ‘credit vacation’ clause for a period of 2 months. So, Company $ sent them the following SMS:

During the state of emergency, Company $ offers you the opportunity to renegotiate the terms of your obligations. Call 12345.

The text message was sent twice, on 1st and 15th of April 2020. As it can be seen, the message content is organized according to the traditional collection process providing information about the opportunity to restructure the payment plan.

As a result of this text message, only 2 (out of 582) clients have called back and stated their willingness to restructure their payment plan. The management faced the fact that this type of informative messages has very little effect on debtors’ behaviour, and driven by the legitimate concern that the number of contactless clients could increase even more, they contacted our research and consulting team working in the field of behavioural science. During the following month, our team created two additional text messages, targeting the group of the contactless clients.

The first SMS was sent on the 1st of May 2020:

You are valuable to us, so we support you now. In view of the state of emergency, Company $ wants to ease the conditions for repaying your debts. Call today at 12345.

This message expressing support aimed to trigger a desire to reciprocate, which is a form of Commitment. The offer is the same as the original message, essentially offering easing of the payment conditions, which usually includes offering longer terms repayment, but not reducing the payments. The company offered deferred payments – i.e. smaller instalments and payment of the same amount for a longer period. The client is also offered an option for a credit vacation of up to 3 months after which these missed instalments will be made to catch up with the instalments (a clause in the debtor’s
contract can be activated and he will not pay at all on his loan for up to 3 months, and then for a certain period (which already depends on the creditor). When such an agreement is signed, the debtor does not enter into arrears and remains a loyal customer, he is not in the registers of incorrect debtors, his credit rating does not deteriorate, etc. The intended effect is motivating these debtors to call and reschedule their debts, which puts them back in the pathway of people who service their loans, albeit more slowly (de Matos, Vieira, Bonfanti, & Mette, 2019).

The second SMS was sent on the 15th of May 2020, which reiterated and reinforced the offer of support in the previous message:

Financial support for the clients of Company $. We renegotiate the terms of payment of debts in your favour. To take advantage, call 12345.

It is evident that the second text message also uses the effects of Commitments – specifically reciprocity (a sign of goodwill from Company $ to renegotiate the terms of payments).

The primary outcome was the number of clients who called back and stated their intention to restructure their payment plan.

RESULTS

We run a trial with one group only, where there were 2 stages in the intervention. During Stage 1, all 582 clients received a control (standard) message, and 2 responded by calling back and stating their intention to restructure their payment plan (see Table 2).

We calculated Odds ratio comparing the control message vs. intervention message 1, which revealed that individuals getting Control Message and Message 1 are 16 times more likely to respond to the invitation letter than those with control message only (see Table 3).

During stage 2, the remaining 580 receive intervention message 1, and 31 called back and stated their intention to restructure their payment plan. The remaining 549 debtors received intervention message 2, and 28 responded. So, in total, 59 debtors responded after the two intervention messages were sent out, compared to only 2 responders when the standard message was sent (see Table 4).

Most important was the comparison between the effect of the standard control message vs. the combined effect of intervention messages 1 and 2, which revealed that debtors are 33 times more likely to respond to the invitation letter when the two messages are sent (see Table 5).

<table>
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<tr>
<th>Table 2. Results for Control message vs. Message 1</th>
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<tr>
<td>Responded</td>
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<td>-----------</td>
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<tr>
<td>Control (Not exposed)</td>
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<tr>
<td>Message 1 (Exposed)</td>
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<th>Table 3. Odds ratio Control vs. Message 1</th>
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<tr>
<td>Odds ratio</td>
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<td>z statistic</td>
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<td>Significance level</td>
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DISCUSSION AND CONCLUSION

The reported results of a field experiment reveal the impact of a nudge-type text messages targeting a specific group of debtors of a fast-loans company – contactless clients who stopped paying their instalments and also stopped communicating with their creditor during the COVID-19 lockdown phase. We revealed the impact of nudging messages that provoke debtors to feel committed to reciprocate, a specific automatic effect on the decision-making process. The nudges increased the probability of responding to the invitation for credit restructuring, compared to when a standard message is sent. Implementing new behavioural approaches in debt collection strategies is something useful in the context of the new social reality created by the COVID-19 pandemics.

Reciprocity can be effective in fundraising in general. In a large-scale natural experiment with an international charity for children, pre-donation “thank you” postcards made by the children were sent out to potential donors along with the fundraising letter (Falk, 2007). One group received only one postcard and the other one received four postcards. Compared to a third group did not receive any postcard, one postcard had a 17% higher rate of donation, four postcards had a 75% higher rate of donation. Another field experiment revealed how inducing reciprocity in donors by giving small packets of sweets can materially increase donations - the existing scheme of Deutsche Bank asked employees to donate a day of their salary to charity on a single day of the year (Behavioural Insights Team, 2013).

As this article argued earlier, debt collection strategies should take into account that, like all human decisions, the debtor’s decisions are subject to bias and other psychological effects. Furthermore, some implication of the reported findings can be used for changes and adjustments of the traditional debt collection policy. In that context, financial services and government organizations should consider ‘smarter’ recovery strategies in which the traditional and behavioural approaches are combined together to deliver more consistent results and mitigate losses. Based on our field experiment, financial services regulators and authorities may mandate that debt collectors should use similarly ‘kind’ messages and support offers for debt accounts during pandemics.

In situations like this when societies have been physically affected, financially shaken, and even psychologically traumatized by the COVID-19 crisis, we may expect a change in the normal pattern in which citizens pay their debts to their creditors (Amit et al. 2020). Such circumstances may raise discussion about the importance of values such as civic responsibility and individual freedoms in the context of debt collection. Before this pandemic situation, many financial services companies may have had mostly loyal clients, but now, they have to be ready for different scenarios. It is possible (we hope not certain) that in the near future the financial services sector will go through some difficulties and

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Table 4. Results for Control message vs. Message 2

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<th></th>
<th>Responded</th>
<th>Not responded</th>
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<tr>
<td>Control (Not exposed)</td>
<td>2</td>
<td>580</td>
</tr>
<tr>
<td>Message 1 and Message 2 (Exposed)</td>
<td>59</td>
<td>521</td>
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Table 5. Odds ratio Control vs Message 1+ Message 2

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<tr>
<th></th>
<th>Odds ratio</th>
<th>95% CI</th>
<th>z statistic</th>
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<td>32.8407</td>
<td>7.9844 to 135.0776</td>
<td>4.839</td>
<td>P &lt; 0.001</td>
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challenges. And despite the fact that most financial services companies in the European Union have relatively effective debt collection procedures, they may have to reconsider some of their practices and communication strategies in order to adapt to the new reality. To aid these financial institutions, there exist behavioural insights and the debt-collection know-how accumulated so far.

A CONFLICT-OF-INTEREST STATEMENT

The authors have no competing interests to declare.

FUNDING INFORMATION

Not applicable.
REFERENCES


ENDNOTES

1 This is not a complete list of all the mechanisms of influence, but can provide some insight on the topic. It is taken from the MINDSPACE framework, which gives guidelines for influencing behaviour through public policy. Website: http://www.behaviouralinsights.co.uk/publications/mindspace/

2 Due to lack of abilities to use online apps – especially among elderly customers and minority groups.


5 https://www.capital.bg/biznes/finansi/2019/05/10/3536845_okrileni_ot_potrebiteelskiia_bum/

6 We cannot run test comparing intervention message 1 vs message 2, because the recipients of the latter message were already exposed to the first message which contains components of the same nudge.