Journal of Economic Behavior & Organization 140 (2017) 246–266

Contents lists available at ScienceDirect

Journal of Economic Behavior & Organization

journal homepage: www.elsevier.com/locate/jebo

Cheap promises: Evidence from loan repayment pledges in an online experiment☆

Syon P. Bhanot

Swarthmore College, 500 College Ave, Swarthmore, PA 19081, USA

ARTICLE INFO

Article history:
Received 23 January 2016
Received in revised form 27 March 2017
Accepted 11 April 2017
Available online 8 June 2017

JEL classification:
C93
D14
D18
G21

Keywords:
Promises
Decision making
Field experiment
Loan
Repayment

ABSTRACT

Across domains, people struggle to follow through on their commitments. This can happen for many reasons, including dishonesty, forgetfulness, or insufficient intrinsic motivation. Social scientists have explored the reasons for persistent failures to follow through, suggesting that eliciting explicit promises can be an effective way to motivate action. This paper presents a field experiment that tests the effect of explicit promises, in the form of "honor pledges," on loan repayment rates. The experiment was conducted with LendUp, an online lender, and targeted 4,883 first-time borrowers with the firm. Individuals were randomized into four groups, with the following experimental treatments: (1) having no honor pledge to complete (control); (2) signing a given honor pledge; (3) re-typing the same honor pledge as in (2) before signing; and (4) coming up with a personal honor pledge to type and sign. I also randomized whether or not borrowers were reminded of the honor pledge they signed prior to the repayment deadline. The results suggest that the honor pledge treatments had minimal impacts on repayment, and that reminders of the pledges were similarly ineffective. This suggests that borrowers who fail to repay loans do so not because of dishonesty or behavioral biases, but because they suffer from true financial hardship and are simply unable to repay.

1. Introduction

A growing body of research suggests that people find it challenging to stick to financial commitments, be it saving more, spending less, or repaying loans. For loan repayment in particular, borrowers may fail to repay for one of two reasons — either the borrower wants to repay but is unable to, or the borrower does not want to repay. In the former scenario, this could be because behavioral biases like limited attention or status quo bias inhibit decision making (Banerjee and Mullainathan, 2008; Samuelson and Zeckhauser, 1988; Karlan et al., 2010), or because the borrower faces significant financial hardship and does not have the means to repay. In the latter scenario, this could be because an individual is "taking advantage" of the loan system, taking a loan they never intend to repay and disappearing with the money. Understanding which of these scenarios best explains loan defaults is crucial for understanding behavior in the market for consumer loans.

☆ I would like to thank Richard Zeckhauser, Brigitte Madrian, Dan Ariely, and Michael Norton for their guidance and advice, along with two anonymous referees who provided valuable feedback. A special thanks is also due to Sasha Orloff, George Lewis, Shane Berry, and Tim Lucas, who were instrumental in getting this project completed. I also thank Vivien Caetano, Leila Chammas, Cindy Chen, Chiamaka Uzor, and Charles Williamson for their excellent research assistance.

E-mail address: sbhanot1@swarthmore.edu

http://dx.doi.org/10.1016/j.jebo.2017.04.007
0167-2681/

Recent research in behavioral economics suggests that altering decision-making environments can help people overcome behavioral biases and make welfare-improving financial decisions. For example, in an experiment in the Philippines, Ashraf et al. (2006) showed that commitment savings products increase savings substantially. In another experiment in Uganda, Cadena and Schoar (2011) find that text message reminders increase loan repayment by nearly the same amount as sizable financial incentives. Additionally, work in the laboratory has found honor pledges and explicit promises to be an effective way to encourage honest behavior by triggering some combination of "guilt aversion," an intrinsic motivation to keep promises, and heightened self-awareness (Charness and Dufwenberg, 2006; Vanberg, 2008; Shu et al., 2012; Duval and Silvia, 2002). These results together suggest a possible avenue for encouraging greater loan repayment; by addressing behavioral biases that might hinder repayment and by using honor pledges to encourage honesty, it should be possible to encourage those who are able to repay their loans to do so. If, on the other hand, these tools are not effective in increasing loan repayment, it suggests that delinquent borrowers may simply face financial constraints preventing repayment.

In this paper, I explore if and how explicit promises and behavioral tools influence loan repayment behavior, using a natural field experiment with an online lender, LendUp. In the experiment, I use various "honor pledges" at loan initiation, along with email reminders of the pledges, to motivate loan repayment.

This paper contributes to existing literature in two ways. First, as far as the author can tell, there are no field experiments testing the impact of explicit promises on real-world decision making. For example, while Shu et al. (2012) do conduct a field experiment involving signing an honesty pledge, they focus more on truthful reporting than on follow up behavior. Second, most existing work focuses on peer-to-peer promise scenarios, namely experimental games in which participants make promises to each other (Charness and Dufwenberg, 2006; Vanberg, 2008; Ellingsen and Johannesson, 2004), rather than on promises made to institutions or firms, as in this paper. Two exceptions are research on honor codes, mostly in the education literature (Mazar et al., 2008; McCabe et al., 2001), and work on virginity pledges and their effect on sexual behavior (Landor and Simmons, 2014). However, while violations of honor codes in education are sometimes punished and violations of virginity pledges may have social consequences, they do not generally have the same economic and legal ramifications as violating loan agreements. Therefore, results from research on honor codes and virginity pledges may not generalize to contexts where legal and formal relationships bind economic actors, as they do here.

The experiment targeted 4,883 first-time borrowers with LendUp. These borrowers were randomized into seven groups, using a 3×2 incomplete factorial study design. A control group received no honor pledge, and there were three honor pledge versions used as treatments: (1) signing a given honor pledge; (2) re-typing the same honor pledge as in treatment (1) before signing; and (3) coming up with a personal honor pledge to type and sign. To complete the 3×2 design, I also randomized whether or not borrowers who received an honor pledge treatment were reminded of the honor pledge they signed in an email message sent prior to the repayment deadline. Using this design, I test the idea that making an explicit promise can motivate repayment by giving borrowers an intrinsic reason to repay, and that reminders about those explicit promises might increase their impact. I also disaggregate the results by income, age, and gender.

Disaggregated treatment effects are important in this context. Social scientists have found that poverty-related concerns consume significant mental resources for the very poor, reducing their cognitive capacity and performance (Shah et al., 2012; Mullainathan and Shafir, 2013). These findings suggest that poorer households taking short-term loans may be more susceptible to behavioral biases, "tunneling" effectively on short-run needs while neglecting problems that manifest in the longer run (like compounding loan fees). This can be especially damaging because these borrowers generally have limited access to affordable credit, meaning that failure to repay one loan can drive borrowers to increasingly costly or risky loan options. Therefore, "soft commitments" in the form of explicit promises may be helpful in nudging lower-income borrowers to repay, by bringing repayment into their "tunnel." Alternatively, it may be the case that richer (or older) borrowers are more "behaviorally elastic" than lower-income (or younger) borrowers, and therefore more likely to respond to behavioral interventions. Finally, there is a robust literature in both psychology and economics on differences in decision making between men and women (Eagly and Wood, 1999; Croson and Gneezy, 2009), and one might anticipate that promises may be differentially effective by gender. My disaggregated analysis provides some evidence on these questions.

The results suggest that the honor pledge treatments had minimal impacts on repayment and other related outcomes. Specifically, I tracked four outcome indicators in the aftermath of the experiment: (1) paying off the loan; (2) paying off the loan in exact accordance with the initial agreement (being a "perfect payer"); (3) being overdue in repayment at some point; and (4) the number of days until repayment.[1] While the honor pledge treatments had small positive impacts on two of these outcome variables (paying off the loan and being a "perfect payer"), none of the observed effects were statistically or economically significant. Additionally, there is little evidence to suggest that any particular honor pledge treatment outperformed any other, nor is there evidence to support a positive impact of being reminded about the honor pledge in the days immediately preceding the loan repayment due date. Together, this evidence suggests that loan defaults in the short-term loan market are most likely the result of borrowers' financial constraints, and not dishonesty or behavioral biases inhibiting repayment.

[1] In an earlier version of this paper, six outcome variables were reported, but it was difficult to interpret two of those six variables, as they were conditional on having been overdue in repayment. So I omit these outcome variables here.