## PROJECT EVALUATION: Borrow Less Tomorrow



Fighting Poverty with Innovation, Evidence and Action



**United States** 

### **Project Overview**

**RESEARCHERS:** Dean Karlan, Jonathan Zinman

PARTNERS: Community Action Project of Tulsa County

LOCATION: Tulsa, Oklahoma

SAMPLE: 465 low-income Volunteer Income Tax Assistance clients

**TIMELINE:** 2010 - 2012

#### THEMES:

Savings, Product Design, Financial Literacy, Commitment Devices

#### **POLICY GOALS:**

Explore the use of behavioral approaches for debt reduction

#### **POLICY IMPLICATIONS:**

Given the small size of the pilot, the findings outlined in this brief are merely suggestive but encouraging. Results point to strong demand for new debt reduction products and services with behaviorally-engineered features. For many households, debt decumulation is the most efficient way to increase net worth. Borrow Less Tomorrow (BoLT) aims to test a debt reduction tool that combines a simple planning process with reminders and peer support. IPA implemented a pilot of the BoLT program as part of a randomized evaluation in collaboration with the Community Action Project of Tulsa County in Oklahoma. This study finds strong demand for debt reduction products and services with behaviorally-engineered features.

### **POLICY ISSUE**

Mounting evidence from the intersection of economics and psychology suggests that consumers often do themselves more harm than good when making financial decisions. American households tend to borrow too much and save too little. This imbalance has strong implications for households' ability to meet basic needs, build assets, prepare for retirement, and weather negative shocks such as emergency expenses or unexpected unemployment.

The debt burden among U.S. households is much higher than would be predicted by standard

"American households tend to borrow too much and save too little" economic models of consumer choice. Furthermore, savings rates have tended to be lower in the U.S. than in many other developed countries. According to the Survey of Consumer Finances, 77% of American families held some sort of

debt in 2007.<sup>1</sup> While access to credit can be beneficial - providing emergency liquidity and the ability to purchase large assets such as real estate and higher education - the overextension of consumer credit has become more widespread in recent years and has particularly serious consequences for low- and middle-income families. About 60.3% of families with credit cards had an outstanding balance at the time of the Survey of Consumer Finances in 2007, and of those families the average balance was \$7,300 in 2004, compared to \$2,300 in 1992.

A similar 2010 survey conducted by the New York City Office of Financial Empowerment found that these figures hold true even in low-income neighborhoods where the ratio of credit card debt to median income puts over-indebted households at particular risk.<sup>3</sup> Another survey conducted by Demos in 2008 found that 37% of low- and middle-income respondents used credit cards to cover basic living expenses such as housing and utilities.<sup>4</sup> Furthermore, a 2010



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poll by America Saves found that 16% of Americans hold debt from expensive fringe financial products such as payday loans, auto title loans or pawn shop loans.<sup>5</sup> While low- and middle-income households typically have less credit available to them than high-income households, the impact of even seemingly low balances becomes much more significant relative to household income .

Even as families become over-indebted, they may continue to borrow and thus further compromise their ability to devote any discretionary income to more productive uses in the present, create a safety net for the future, or make large investments in the future. In borrowing too much and saving too little, families put both their present and future wellbeing at risk.



## **THEORETICAL FOUNDATIONS**

One likely factor influencing low rates of saving and high reliance on credit card debt is behavioral. Consumers the world over tend to be more impatient in the near-term than in the long-term and thus have a propensity to make purchases that are later regretted. In a series of lab experiments, Bone, Hey and Suckling find that a majority of people do not plan ahead and that the opportunity to gain experience does not make them more likely to plan.<sup>6</sup> Interestingly, they find more evidence of planning when people are forced to pre-commit to a decision. The potential benefits of pre-commitment go beyond the creation of a plan of action. The novelty of a commitment device is that people may benefit from voluntarily imposing additional costs on themselves to give themselves added incentives for goal attainment. Research suggests that commitment devices might be a good mechanism for mitigating tendencies for poor planning and procrastination.

Limited attention may also play an important role in consumer choice. Limited attention refers to the cognitive process of selectively concentrating on one aspect of the environment while ignoring others, which can make it difficult to maintain focus on a financial plan. In previous work, Karlan, Zinman and McConnell develop a novel theory of limited attention wherein individuals may overlook future expenditure opportunities, leading to mistakes in financial planning.<sup>7</sup> In this model, the failure to plan for future expenditure opportunities can distort consumption decisions and lead to less smoothing (via more borrowing and/or less saving) than would occur under perfect or unbiased foresight. Creating a financial plan – for example a plan to reduce existing debt – and sticking to it over time requires constant work and attention. This model generates the testable prediction that reminders focused on future needs or opportunities can lead to changes in financial behavior, for example more consistent compliance with an established financial plan.

## SUGGESTED INTERVENTIONS

Borrow Less Tomorrow, or BoLT, is designed to counter several behavioral tendencies that can lead to high leverage. BoLT employs three principal interventions:

**Accelerated Repayment Plan** – The main feature of BoLT is an action plan that increases one's monthly payments on a single credit card or auto loan that they currently hold. The payment schedule explicitly predicts net savings and reductions in repayment time, stating that "by increasing your monthly payment from XX to YY, you will save \$XX in interest and get out of debt XX months faster." The user then commits to increasing their monthly payments by a fixed amount, during a fixed timeframe.



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**Reminder Messaging** – Once a BoLT user has pre-committed to an accelerated repayment plan, they are also enrolled in a reminder messaging plan whereby they receive a monthly reminder call, email or text message mentioning their monthly commitment and reminding

them to stay on track. These reminders are intended to help overcome the negative effects of limited attention and keep the client on track for the full duration of their commitment.

**Peer Support** – Finally, BoLT employs a social commitment device in order to add teeth to the client's initial commitment. Examples of successful commitment devices in other settings include performance bonds for smoking cessation,<sup>8</sup> and making assets substantially less liquid until a savings goal amount is reached.<sup>9</sup>

*"Reminders focused on future needs... can lead to changes in financial behavior"* 

These particular forms of commitment devices are not feasible in a debt reduction scenario where the target market, overleveraged borrowers, is cash constrained. Peer support, however, threatens a social sanction for noncompliance which is inexpensive, non-binding and easily scalable.

As part of the peer support feature, the BoLT user gives the contact information of selected peer supporters (usually friends and relatives) who can provide encouragement and motivation should they fall behind on their payments. The BoLT provider then monitors the individual's compliance with his or her payment schedule. If the individual failed to meet his or her goal, the BoLT provider then contacts the individual's peer supporters and asks them to provide encouragement and support to get back on track. In this experiment, IPA monitored BoLT plan compliance by conducting soft pulls of participants' credit reports at the end of each month, and comparing the actual balances (allowing for a delay in reporting) with the target balances listed in the payment schedule.





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## **STUDY METHODOLOGY**

Innovations for Poverty Action designed and implemented a field experiment to address these research questions in collaboration with Community Action Project (CAP), a Tulsa-based nonprofit organization. CAP serves low-income residents across Tulsa County, Oklahoma with one of the largest (per capita) free tax preparation programs in the country, returning \$36 million in tax refunds annually. During the 2010 tax season, CAP partnered with Innovations for Poverty Action to conduct a randomized evaluation pilot of BoLT. This methodology allows the research team to isolate the effects of the treatments themselves so that they can be confidently attributed to the BoLT interventions and not to other unobserved personal characteristics of the beneficiaries or other factors.

In addition to exploring the operational feasibility of the BoLT intervention, this RCT sought to address the following three research questions:

- 1. Can commitment products be successfully implemented in the context of debt reduction?
- 2. Do commitment products actually reduce indebtedness among those who use them?
- 3. Can peer reinforcement and monitoring be leveraged to increase the efficacy of these commitment products?

The high volume of clients at CAP's tax preparation centers resulted in long wait times for most individuals seeking tax preparation services. As clients waited, CAP staff periodically asked people in the waiting room if they were interested in completing a survey about their financial well-being, and tax preparers also encouraged the people they were assisting to

"Can peer reinforcement and monitoring be leveraged to increase the efficacy of BoLT?"

complete the survey. All individuals were offered a \$5 gift card redeemable at local gas stations as an incentive to participate in the survey, as well as a free printed copy of their credit report.

Individuals who consented to being surveyed and having their credit reports pulled were then interviewed by an IPA-trained surveyor in a private location at the tax center. Initially, all individuals who completed the survey and had qualifying auto or credit card debt were included in the sample and randomly assigned to a treatment status. A filter was later imposed restricting treatment assignment to individuals with



qualifying debt who also expressed an interest in reducing their debt when prompted by the surveyor.

Clients with qualifying debt were randomly assigned to one of two treatment assignments:

- 1. BoLT repayment plan with reminder messaging and peer support
- 2. Control no treatment

The study sample consists of 465 individuals with qualifying debt who visited a CAP tax preparation site between January and April 2010. In addition to conducting a soft pull of each person's credit report, a baseline survey was also administered in order to collect demographic information, a descriptive portrait of the financial situation, financial attitudes, and financial literacy levels of individuals in the sample. In

addition, the survey included questions that sought to measure cognitive biases that would be likely to influence individual financial behavior in this context, such as time-inconsistent preference reversals and exponential biases. These tests used hypothetical financial situations to elicit discounting preferences and measure individual ability to accurately perceive the effects of hyperbolic discounting. For more details on the demographics of the study participants and the information collected in the baseline survey, refer to the "Study Population Characteristics" box.



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### **FINDINGS**

#### Demand

Among those randomly offered BoLT, 41% signed up for some version of it. Of those that signed up for BoLT, 41% chose an escalating repayment plan for their chosen debt, 27% took up an offer to have a peer supporter as a social commitment feature for following the new repayment plan, and 81% signed up for phone or email reminders.

BoLT take-up was only weakly correlated with individual survey and credit report variables (e.g., income, credit score, education) but taken together these variables were jointly significant predictors of take-up. This suggests that future analyses of demand for BoLT on larger samples could produce sharper estimates of the relationship between individual characteristics and BoLT take-up. As for peer support, the statistical evidence suggests that interest in getting peers involved in one's personal finances may differ across age cohorts. This feature may also appeal to individuals who report regretting spending money. On the other hand peer support take-up is also correlated with patient and time-consistent preferences. So the evidence on whether peer support appeals more to individuals with costly self-control problems is surprising (it seems instead to appeal more to more-patient people) and mixed. Overall, neither the credit report nor the survey variables (nor the two groups jointly) predict peer support take-up.

#### **BoLT Performance**

Our principal mechanism of understanding BoLT performance is through credit report data. We find that 51% of BoLT clients are on track at the 12-month mark. If debt reduction goals suffer from low follow-through (as is the case with, for example, smoking cessation and weight loss), then a 51% on-track rate may be quite high.

Although BoLT was targeted towards a single loan, we focus on aggregates within loan types such as credit cards and auto loans. We focus on loan-type aggregates because we are interested in broader measures of indebtedness and financial condition that allow for spillovers such as substitution between BoLT-targeted debt reductions and other debt reductions (whereby an individual may increase payments on a BoLT-targeted debt by neglecting payments on other debts). We also lack a good way of statistically identifying which loan someone in the control group would target if they used BoLT. But given the wide variation in individual loan balances and the relatively small sample size of the pilot, our estimates are imprecise. The treatment group that randomly received a BoLT offer had lower credit card balances

### STUDY POPULATION CHARACTERISTICS

- 465 individuals holding high interest credit card or auto loan debt who visited a VITA site in 2010
- Average baseline credit score: 603
- Average total credit card balance: \$2,408
- Average total auto loan balance: \$5,650
- About 75% of the population is female
- Average age was 44 years old
- Fifteen percent had an annual household income below \$10,000 in 2009; 44% were below \$20,000 and 75% were below \$30,000
- Thirty percent reported their highest education qualification as a high school diploma, GED, or less. 18% hold a bachelors degree or higher
- 42% were not able to pay their rent, mortgage or utility bills in 2009
- 1 in 3 had to skip or reduce the size of their meals in the past year because there wasn't enough money for food
- 4 in 5 agreed with the statement: "I often find that I regret spending money. I wish that when I had cash, I was better disciplined and saved my money rather than spent it"
- 37% were turned down for credit or did not receive as much as they applied for in 2009
- 50% had been dissuaded from applying for credit in the past year because of their financial situation
- 43% rated their household financial situation as "not very good" or "bad"



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on most measures than the control group, but most results are not statistically significant. Two of the specifications in the full sample (with balances measured in changes) show significant reductions in credit card debt for the group that received a BoLT offer, but the results are not very robust. With auto loans too we find that BoLT offers are associated with lower balances but none of these estimates are statistically significant. We find no evidence that BoLT improves other indicators of financial wellbeing like credit scores, delinquencies, active trade count, and utilization rate of available credit.

To summarize, we find strong demand for debt reduction products and services with behaviorally-engineered features, but only suggestive evidence that such a product improves the overall financial health of individuals. The pilot thus serves as a promising springboard towards offering variants of BoLT that adapt its features to different markets and business models.



\*The accelerated repayment plan was the option to increase monthly payments by an additional \$10 each month

### **Acknowledgments**

This research was made possible by the generous support of the FINRA Investor Education Foundation and the Social Security Administration (through the Boston College Financial Literacy Research Consortium).

Special thanks to the leaders and staff of the Community Action Project of Tulsa County for working with us to pilot test Borrow Less Tomorrow.

All views are those of the authors and are not necessarily shared by the funders, the Community Action Project of Tulsa County, or Innovations for Poverty Action.

### **NEXT STEPS**

The limitations of the present study highlight several areas for future research. We view the BoLT design as modular and adaptable to different markets and business models. One could (and probably should) offer a broader range of planning and commitment options; e.g., providing an option for using BoLT to manage total credit balances (instead of focusing only on one account, as we did in the pilot). Balance targets could allow for goals and commitment over controlling new borrowing as well as reducing existing debts. Commitment options could be expanded to include additional "soft" options (setting up automatic payments from checking to

debt accounts) and/or hard options (e.g., a client authorizing the BoLT vendor/ administrator to cut off access to charging privileges in the event of non-compliance with the plan). Online decision aids might take the place of "high-touch" marketing or counseling sessions. Direct marketing could be used to make customized recommendations. Follow-up messaging might include feedback along with (or instead of) reminders. And of course, "The use of behavioral approaches for debt reduction is in its infancy; this pilot is a baby step, hopefully in the right direction"

randomized testing on large samples can be used to evaluate the (cost-) effectiveness of these different design features and packages.



#### Endnotes

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