Executive Summary

Many Americans are struggling to manage their cash-flow effectively. This is largely due to high income volatility, and unexpected expense shocks. As the Center for Financial Services Innovation has documented, cash flow management is not an issue affecting just temporary, seasonal, or contract workers. According to the U.S. Financial Diaries Project, the average family income experiences a 25% increase or decrease from their median income for more than five months out of the year.

In their 2015 report, after analyzing over 100,000 account holders, the JP Morgan Chase Institute published that “individuals experience high levels of income volatility and higher levels of consumption volatility across the income spectrum ... the typical household did not have a sufficient financial buffer to weather the degree of income and consumption volatility observed in their data.”

In our own analysis of 1099 contract workers, we found that contract workers experienced large income volatility, with incomes varying by a factor of 10 in the last year.
With all of this income and expense volatility, it is amazing that people are able to budget at all.

**What we are doing**

To help individuals better manage their cash flow, we’ve partnered with four organizations to:

- Help eligible individuals apply and receive/utilize SNAP benefits
- Help individuals manage their SNAP benefits more effectively throughout the month
- Help underbanked individuals manage their paycheck deposits
- Help people stick to their financial coaching plan

To date, we launched two field experiments (both of which are still in the field); we are also in the process of developing two prototypes, and have added to our theoretical understanding of budgeting through a novel laboratory budgeting experiment.

**Our key insights**

Through our four partnerships, we’ve learned how difficult it is for eligible people to manage their cash flow, especially given their income and expense volatilites. Yet, there are environmental changes that we can make to help people overcome these challenges:

- **Opportunities to influence what people do with their income are the highest in the moment people receive it.**

  In partnership with Propel, a company that allows SNAP recipients to see their SNAP balance through a mobile app, and with the Latino Community Credit Union (LCCU), we learned that one of the most effective ways to help people manage their cash flow is at the point in which they receive their income. It is at this time that consumers are most engaged with their finances.

  With LCCU, we added barriers to people cashing their entire paychecks, and we encouraged them to deposit part of their paycheck into savings. We could have asked members to increase their savings account contributions at any point in the month, but the real saving opportunity is created when we intervene at the point of payment.
• Giving shorter parameters and smaller timeframes helps people think about the opportunity costs of spending.

With Propel, we learned that how we display income (in this case, government benefits) has a real impact on behavior. When someone receives income, they are in a “windfall” mindset. They are not thinking about their future expenses, but just about the money they received. Thus, they feel a false sense of “security.” Highlighting people’s pro-rated weekly income vs. their total income impacts this “windfall” effect and helps people budget better.

• When an action is difficult, financial incentives are often not enticing enough.

In partnership with Robin Hood, the largest poverty-fighting organization in New York, we are working to increase the number of completed SNAP applications in New York City. For many low-income families, receiving SNAP benefits can be life-changing, as the average family receives $250 a month for groceries. However, even with this incentive, less than half of the applications started are actually submitted.

The SNAP application process is complex, with most people dropping out, not because they do not want the benefits, but because they fail to submit documents or schedule an interview. Here our interventions revolve not just around reducing the barriers, but around also sending frequent reminders.

In addition, our interventions with LCCU and Propel have shown great promise because they are not just one-time interventions, but they occur every time someone gets a deposit.
The Latino Community Credit Union was founded in 2000 as a grassroots response to a wave of muggings of Latino immigrants in Durham. Since then, it has become a large credit union providing access to financial services to over 60,000 members in North Carolina, many of whom have little or no credit history in the U.S.

LCCU partnered with Common Cents to find ways to help members manage their cash flow by increasing short- and long-term savings. Through the diagnostic work described below, we narrowed this question to two main challenges: (1) How to increase deposits among members who only cash their checks; and (2) How to increase automatic transfers to savings accounts among members who are getting a loan.

Behavioral diagnosis
Common Cents performed several rounds of data analysis of members’ deposits and cash checking patterns. Common Cents also interviewed 12 LCCU members, with both high and low levels of engagement with the credit union. The interviews covered topics on access and use of financial
products, and savings practices. We paired the interviews with a deep-dive into the process of making deposits and using other LCCU products. This exercise included site observations at branches and interviews with customer-facing staff.

**Key insights**

We learned that many members use shortcuts to decide how much to deposit into their savings account, such as depositing the amount of money they have left by the time they receive their next check or their smallest check if they have multiple sources of employment.

We decided to focus the first part of the project on further increasing the shortcuts to savings among check-cashers (which represents about 18% of the total volume of transactions that members make at LCCU’s branches).

**Experiment 1: How can we increase shortcuts to savings among check-cashers?**

In October 2016, we launched a pilot experiment aimed at increasing deposits among members who walk into LCCU branches to cash their whole checks. This experiment had four conditions: a control and three experiment conditions, which changed the check cashing slip.

First, the slips created friction cost to cashing a check, as there was no slip required prior to the experiment. Second, the slips contained different combinations of the following ideas: defaulting members into depositing 50% of their checks, signing a risk waiver that highlights the opportunity costs of not depositing, thus increasing the pain of paying for the check cashing fee.

![Check Cashing Slip](image)

**Figure [3]:** Check cashing slip with pain of paying, default and opportunity cost.
We observed that members in the treatment group made significantly more deposits. In 9.26% of the cases, the slips prompted a behavior change, switching check-cashers into depositors. These members deposited an average of $169 of their paycheck, equivalent to 22% of their check’s value.

If adopted and implemented across the board, the slips could impact short-term savings of 10,000 members. Following the current analysis, we will compare follow-up outcomes, observing whether members who received the slips made more deposits between one an two months of the intervention.
There are over 45.8 million people (roughly 1 in 7 individuals in the US) who benefit from the Supplemental Nutrition Assistance Program (SNAP). This is a critical program in the United States as 50% of Americans will be eligible for SNAP at some point during their lifetime. The program helps low-income families by giving them a monthly food allowance of $250 on average per household.

These benefits are administered on a monthly basis. This design has negative consequences on behavior as it creates a “windfall” effect, leading people to temporarily disregard their future expenses. Especially after a period of scarcity, the deposit of a monthly lump sum can lead to overspending and misappropriate spending. For example, in Peru, when the government assistance moved from twice-a-month to monthly payments, they saw a 70%
increase in the purchase of alcohol and sweets. (Note: In the U.S. SNAP benefits cannot be used for alcohol, but only for groceries.) This monthly lump sum creates what we call a “feed and famine” cycle, where according to the USDA, many families run out of their SNAP benefits mid-month. Studies have shown caloric intake decreases through the benefit month, contradicting claims that bulk buying is offsetting the front-loaded spending.

To understand how we can help SNAP recipients budget their benefits more effectively, we partnered with Propel, the fin-tech startup in New York behind “Fresh EBT,” a mobile app where SNAP food stamp recipients can check their balance and transaction history. SNAP recipients typically have to save receipts or call a phone line to find their balances, but with Fresh EBT, they can check their balances instantly, see recent transactions, find stores that accept EBT, make a shopping list, and access other useful resources.

**Behavioral diagnosis**

Common Cents partnered with Propel to create a database that analyzes users’ spending patterns. Through this work, we analyzed over 20,000 users and over 260,000 transactions. We conducted in-depth interviews with Propel employees, as well as industry experts in the field. Additionally, we are in the process of conducting qualitative interviews with a number of SNAP recipients.

**Key insights**

This deep data analysis allowed us to get meaningful insights into the spending behavior of SNAP recipients, including:

- **Small and frequent dollar purchases are the norm.**
  Most purchases made are small dollar purchases, with the average purchase totaling $30.94. Close to 20% of purchases were less than $20. In addition, the average SNAP recipient makes 11 purchase trips, 2-3 of them on the day of the SNAP benefit deposit.

- **SNAP benefits deplete quickly.**
  Our analysis depicts a grimmer picture than the USDA reports, as the average SNAP recipient spends 80% their benefits in the first nine days. By day 21, the average SNAP recipient has spent their entire SNAP balance.
Many of these insights were shared publicly through our “Fixing the SNAP (Food Stamp) System, from application to spend: Learnings from the Field” webinar.

**Experiment**

From our behavioral diagnosis, we decided that we needed to focus on helping SNAP recipients smooth their consumption throughout the month. As such, we needed to directly combat the "windfall" effect. Thus, we created a two-condition experiment. In our control condition, we showed SNAP recipients their monthly SNAP balance (Propel's standard screen). In our experiment condition, we showed SNAP recipients a weekly budget, anchoring them to a weekly spendable amount.
To ensure that our experiment does not have the unintended consequence of people eating lower quality foods for the sake of spending less, we are running weekly surveys about food consumption across all conditions.

Figure [5]: Simplified mocks of user-interface changes in the Propel experiment.

**Results**

We launched this experiment in September, and it was in the field until January 20, 2017. Preliminary results indicated that we were able to help users smooth their consumption by roughly three more days in the experiment condition, as compared to the control condition. This resulted in nine extra meals for a family per month.

Additionally, the weekly health surveys showed that there was no difference in healthiness of consumption between the control and the experiment conditions, contradicting concerns that families would trade off food quality as a result of better budgeting.

This experiment has huge impact for the field. Propel has indicated that pending the success of this
“However much you get in your EBT benefits, it will tell you how much you should spend per week... That's what I really love about it.”

-Propel user, in the weekly budget condition

This experiment has huge impact for the field. Propel has indicated that pending the success of this pilot, it will roll out a version of this intervention, utilizing the behavioral findings of this experiment, to its entire consumer base. To date, Propel is the largest servicer of SNAP recipients nationwide. In addition, we hope that policy makers see these results and try to help people budget by giving SNAP recipients a weekly budget, printing the budget on the EBT card, or by simply making more frequent distributions throughout the month.
Although Food Stamps/SNAP is one of the most visible government entitlement programs in the United States, it is estimated that 1 in 4 individuals eligible for the benefits do not apply. We are working to increase the number of applications coming from the 13.4 million eligible individuals in America who are currently missing out on the necessary aid they are entitled to.

In partnership with Robin Hood, the largest poverty-fighting organization in New York, and Benefits Data Trust (BDT), who focus on directly assisting individuals through the SNAP application process, we are working to alleviating some of the core barriers in the Food Stamp/SNAP application process, and increase the number of completed SNAP applications in New York City, where 33% of eligible households do not apply.
Behavioral diagnosis

We conducted a behavioral analysis to understand the SNAP application process. We listened to initial application phone calls, conducted a behavioral diagnosis of BDT’s outreach mailers, talked to industry experts, and analyzed every form and touchpoint that SNAP recipients receive from the Human Resources Administration when applying to SNAP in New York City.

Key insights

After conducting our behavioral diagnosis, we reached a couple of key findings including:

- **Eligibility uncertainty, not lack of awareness, is a key barrier to applying.**
  Eligible households do not apply to SNAP, not because they don’t know about SNAP, but because they don’t know if they are eligible for the benefits.

![Why do people not apply to SNAP?](image)

*Figure [6]: Why eligible households do not apply for SNAP, USDA.*

- **The application process is costly.**
  Most applicants spend over 6.1 hours just to complete the process. In addition, 39% of working applicants said that they had to miss work in order to complete the application. This is not surprising, given that the average applicant needs to take 2.4 trips to the SNAP office in order to complete an application.
Experiment

Given the findings from our behavioral diagnosis, we are focusing our efforts on:

- Increasing the number of new applications
- Increasing the number of completed applications
- Optimizing the post-application process, in order to increase re-certifications.

We are still in the development phase of this project, but our intervention will revolve around reducing barriers, sending frequent reminders, and displaying progress.

The food stamp application process is long and exhausting, but we believe that reframing the benefits, increasing feelings of urgency, and utilizing social proof are the keys to increasing motivation to start and complete the application process.