



Does the benefits schedule of cash assistance programs affect the purchase of temptation goods? Evidence from Peru[☆]

Justin S. White^{a,*}, Sanjay Basu^b

^a University of California at San Francisco, San Francisco, CA, United States

^b Stanford University, San Francisco, CA, United States

ARTICLE INFO

Article history:

Received 11 February 2015

Received in revised form

31 December 2015

Accepted 11 January 2016

Available online 29 January 2016

JEL classification:

D12

D91

I12

I38

Keywords:

Temptation goods

Conditional cash transfers

Impulse purchases

Alcohol

Tobacco

ABSTRACT

A critique of cash assistance programs is that beneficiaries may spend the money on “temptation goods” such as alcohol and tobacco. We exploit a change in the payment schedule of Peru’s conditional cash transfer program to identify the impact of benefit receipt frequency on the purchase of temptation goods. We use annual household data among cross-sectional and panel samples to analyze the effect of the policy change on the share of the household budget devoted to four categories of temptation goods. Using a difference-in-differences estimation approach, we find that larger, less frequent payments increased the expenditure share of alcohol by 55–80% and sweets by 10–40%, although the absolute magnitudes of these effects are small. Our study suggests that less frequent benefits scheduling may lead cash recipients to make certain types of temptation purchases.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

A common critique of cash assistance programs is that beneficiaries may squander the money or use it in ways that reduce their welfare. A particular source of concern is that husbands will wrest the money from their wives and use it to feed their own vices, such as alcohol and tobacco (John, 2008; Wang et al., 2006). This concern has prompted some programs to give cash transfers preferentially to a female head of the household, who are thought to be more likely to invest in their children’s human capital (Lundberg et al., 1997). Behavioral economists have noted that, in addition to intra-household bargaining between spouses,

[☆] We thank Omar Galárraga and audiences at the 2014 ASHEcon conference and the 2014 Behavioral Economics and Health Symposium for comments. All errors are our own. This study is supported by funding from the National Heart, Lung, and Blood Institute of the National Institutes of Health under award numbers T32-HL007034 (JSW) and K08-HL-121056 (SB), and does not necessarily represent the official views of the NIH.

* Corresponding author. Tel.: +1 415 476 8045.

E-mail address: Justin.White@ucsf.edu (J.S. White).

cash transfers can spur *intra-personal* bargaining conflicts. Many individuals experience a short-run impatience that leads a present self to neglect the long-run consumption plans of past selves and the consequences of impulsive consumption for future selves (Laibson, 1997; O’Donoghue and Rabin, 1999). As a result, present-biased individuals are tempted to spend income on goods that benefit the present consumer but not his future incarnations. Banerjee and Mullainathan (2010) refer to these purchases as “temptation goods.”

In this study, we consider whether the timing of income receipt promotes the purchase of health-related temptation goods among beneficiaries of a conditional cash transfer (CCT) program in Peru. We narrow our focus to temptation goods for two main reasons. First, as cash assistance programs have proliferated in developing countries, researchers and policymakers have begun to understand their impacts on the health and welfare of recipients. The consumption of temptation goods represents an unintended consequence that has rarely been incorporated into evaluations of program effectiveness, despite temptation spending being indicative of a wasteful and potentially welfare-reducing use of program funds. Second, the health and economic impacts of temptation

purchasing likely fall disproportionately on low-income populations. Low-income groups face a long list of complex and competing demands for their mental resources. As a result, they may have limited cognitive “bandwidth” available to devote to willpower (Mullainathan and Shafir, 2013). Several studies find that cognitive performance decreases when a person is mentally taxed (Mani et al., 2013; Spears, 2011), and low-income families are most likely to face this mental strain.

Much of the evidence on temptation purchasing comes from payday or “first-of-the-month” effects. In many contexts, the timing of household purchasing behavior is sensitive to the timing of income receipt, often displaying signs of a regular cycle. Recipients tend to make larger or more frequent discretionary purchases around the time of receipt of a regular income stream. Researchers have documented this pattern among Social Security recipients and vehicle loan recipients in the U.S., paycheck recipients in the U.K., and pensioners in Japan (Stephens, 2003, 2006, 2008; Stephens and Unayama, 2011). In addition, several studies have found a monthly consumption cycle for recipients of food assistance in the U.S. (Wilde and Ranney, 2000; Shapiro, 2005; Hastings and Washington, 2010). These consumption cycles are highly suggestive that individuals have a short-run impatience, or present bias (Huffman and Barenstein, 2005).¹ Patterns of cycling may have particularly serious consequences for low-income households, for example, increasing their risk of health problems as a result of food shortfalls at month’s end (Seligman et al., 2014).

While research has pointed to temptation purchasing in high-income countries, the evidence in low- and middle-income countries tends to downplay its importance. Evans and Popova (2014) conduct a systematic review of the effects of cash transfer programs in low- and middle-income countries on alcohol and tobacco consumption. They identify 19 studies drawn largely from unpublished material, including eight randomized controlled trials. All but two show a negative or null effect of transfers on alcohol and tobacco consumption. The authors suggest several factors that may offset the income effect of transfers on temptation purchasing: cash transfers may induce a substitution effect that increases the value of health and schooling among recipients; social messaging from programs may lead to mental labeling of cash transfers for health and schooling; and money is often targeted to women who are less likely to use alcohol and tobacco.

The findings from Evans and Popova (2014) appear to be robust to different measures of consumption, different estimation strategies, and different countries, although the existing literature does have certain limitations. Several studies suffer from weak methods, for example, being under-powered to detect an effect or using a pre-post design. Several studies focus solely on consumption by children and adolescents, who are not the principal recipients of the transfers nor the primary consumers of temptation goods. As such, they may have limited scope to respond behaviorally to the transfers. At least one study measures outcomes using indicator variables for whether respondents consumed any temptation goods. We hypothesize that cash transfers are more likely to operate on the intensive margin for adults, whose consumption habits are well established, for example, making them more likely to purchase an extra pack of cigarettes than to initiate a smoking habit. Finally, the demand for temptation goods may be manifested through the consumption of goods aside from tobacco or alcohol, such as sweets, that have been far less studied.

¹ Consumption cycles could be consistent with a rational choice model if prices fluctuate cyclically with demand, although at least one study has ruled out this possibility as a driver of cyclical consumption patterns (Hastings and Washington, 2010).

In this study, we exploit a change in the payment schedule of Peru’s CCT program to identify the impact of benefit receipt frequency on the purchasing practices of member households. Starting in January 2010, the payment schedule in the Juntos CCT program in Peru changed from once a month to once every two months. The total annual payment did not change. We hypothesize that larger, less frequent payments lead households to make more temptation purchases. The policy puts more money in the hands of households at one time, which may trigger two behavioral mechanisms that contribute to the purchase of temptation goods. First, present-biased preferences may make recipients who are flush with cash more likely to splurge on temptation goods, a conclusion supported by the literature on payday effects. Second, households are more likely to be in a state of heightened arousal at the end of the month when they are low on cash, and consumers in a viscerally aroused state are more likely to over-estimate their preferences for consuming temptation goods. This tendency is reflected in the old adage never to shop on an empty stomach for fear of consuming more than needed. Behavioral economists refer to the tendency to project one’s current state onto one’s predictions for the future as “projection bias” (Loewenstein et al., 2003). Projection bias may lead hungry consumers to “over-consume” unhealthy goods and consumers in a state of craving to “over-consume” alcohol or tobacco (Read and van Leeuwen, 1998; Badger et al., 2007). Consumers are most likely to find themselves in these visceral states at the time that they receive the transfer.

We determine the impact of the payment schedule change using a difference-in-differences estimation strategy, before and after the policy change for Juntos recipient and non-recipient households. The control group consists of households in comparable low-income districts where Juntos was not available. Using household data from 2007 to 2012, we analyze the impact of the payment schedule change on the share of the household budget devoted to four categories of temptation expenditures: alcohol, tobacco, sweets and sugary foods, and soft drinks. We derive a series of demand equations using a Quadratic Almost Ideal Demand System to study the impact of benefits scheduling on temptation purchasing. We test for temptation purchasing in a repeated cross-section and a panel of households. We include area-level fixed effects in the repeated cross-sectional analysis and household fixed effects in the panel analysis. Thus, in the panel sample, we identify the policy impact by analyzing the purchasing behavior of the same households over time before and after the policy change, controlling for time-invariant confounders.

Two studies have addressed temptation purchasing among beneficiaries in the Juntos CCT program in Peru. Dasso and Fernandez (2013) use quasi-random variation in the payment dates for districts and survey interview dates of respondents in order to isolate the effect of having “cash in hand.” They find that households who recently received a Juntos payment have higher consumption of sweets and soft drinks, each measured as an indicator for any consumption. Consumption of alcohol did not change for those who had cash in hand. Interestingly, the effects on temptation purchasing are concentrated in 2010, the year immediately after the policy under study here went into effect. As part of a broader evaluation of the Juntos program, Perova (2010) examines alcohol consumption among recipient households and a set of control households. Using a difference-in-differences estimator, she finds that Juntos decreased expenditures on alcoholic beverages by 0.15 Peruvian nuevos soles per month.² Using an instrumental variables approach that accounts for selection into the program, the sign on the alcohol coefficient flips; Juntos increased expenditures on alcohol by 0.28

² \$1 ≈ 3 nuevos soles.

Download English Version:

<https://daneshyari.com/en/article/961185>

Download Persian Version:

<https://daneshyari.com/article/961185>

[Daneshyari.com](https://daneshyari.com)