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Measuring the Impact of Unconditional Cash Transfers on Consumption and Poverty in Rwanda

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In 2008, just fourteen years after the genocide against the Tutsis which left the country devastated, Rwanda had recovered enough to introduce an ambitious "flagship" anti-poverty package, the Vision 2020 Umurenge Program (VUP). The program rests on three pillars: a public works scheme, which began to operate that year; a system of direct support grants for those unable to fend for themselves, which was rolled out over a period of seven years, beginning in 2009; and a system of loans for small and medium businesses. The purpose of the VUP program is not just to alleviate poverty, but to help provide a more permanent pathway to sustainable livelihoods (MINALOC, 2011; MINECOFIN, 2017; NISR, 2012). The original, and unrealistic, goal was "to eliminate poverty by 2020", but the government of Rwanda sees value in the program and has continued to support it. The government and its development partners invested USD 50 million in the VUP program during its first decade of operation (Gatsinzi, 2019).

In this paper we assess the impact of the direct support component of the VUP, wherein the government provides unconditional cash transfers (UCTs) to households that are both extremely poor and lack able-bodied adult members. More specifically, we ask to what extent households that receive VUP direct support consume more overall, consume more food (including from their own production), and are pulled out of poverty, and this is the first contribution of our paper. Perhaps surprisingly, an empirical analysis of the impact of the direct support program on household living standards and welfare has not yet been published, although there have been some studies of the effects of the VUP overall (Gahamanyi & Kettlewell, 2015; Gatzinsi et al., 2019; Ndikubwimana & Dusingize, 2016) of the public works scheme (Murphy-McGreevey et al., 2017; Renate Hartwig, 2014), and of whether the effects remain once a households has "graduated" out of the program (Gahamanyi & Kettlewell, 2015; Sabates‐Wheeler et al., 2015).

A recent World Bank study on The State of Social Safety Nets 2018 (Ivaschenko et al., 2018) reviews the nature and extent of social support, including unconditional cash transfers, and includes some basic information on Rwanda. Compared to its peers, Rwanda's social safety nets – mainly unconditional cash transfers, public works, and pensions – have relatively low coverage, reaching an estimated 23 percent of the poorest quintile (Figure 3.4), although for recipients, the benefits are comparatively large, especially for cash transfers (Figure 3.21). An important drawback of the World Bank report is that it takes an accounting ("naïve") approach to measuring the impact of social transfers, which likely overstates their economic impact. For instance, a household spending USD 2.50 per person per day and receiving a transfer of USD 1 per person per day would be assumed to spend just USD 1.50 per person per day in the absence of the transfer; in this example, the transfer lifted the person out of poverty. But this ignores the potential behavioral responses to the transfer. Thus, the second contribution of our paper is that it measures the impact of unconditional cash transfers after allowing for changes in household behavior, and permits us to compare the observed results with those generated by the accounting approach.

We draw on cross-sectional data from a high-quality living-standards survey undertaken by the National Institute of Statistics of Rwanda (NISR) in 2014, and use matching methods to compare recipients of UCTs with those who would otherwise be eligible for them but did not receive them. This is possible because the direct support program only covered the whole country by 2016, so in 2014 there were still enough uncovered households to allow for a valid comparison and a plausible identification strategy. We further check for the robustness of our results by also estimating the treatment effects using three other approaches (Inverse probability weighting; inverse probability-weighted regression adjustment; nearest neighbor matching). The methods yield relatively similar results, which helps allay the concerns of Gary King and others (King & Nielsen, 2016) that the availability of a multitude of models for measuring causal effects leaves too much discretion in the hands of the researcher.

The findings show that participation in the program has positive and statistically significant effects on measured headcount poverty and poverty gap. The program results in an increase in both total and food consumption, with a reduction in consumption of food from home production, and no change in non-food consumption. The fact that average annual cash transfers are equivalent to a third of total consumption, for recipients, plays an essential role in the observed results. The most important finding may be that in measuring the impact of direct transfers, it is essential to allow for behavioral responses, such as reducing auto-consumption, or increasing investment in assets and farming. A purely accounting approach to the impact of direct transfers seriously overstates the effects on poverty and consumption.