

Iris Boutros
Harvard University

Direct and Spillover Effects of a Child-Targeted Unconditional Cash Transfer on Education and Health Outcomes in South Africa

Abstract

Conditional cash transfer programs are having significant effects on human capital investments in poor households. Would poor households in poorer countries make these investments even if the cash transfer was unconditional? Although nontrivial program resources are spent on verifying that participants meet conditions, the marginal benefit of conditions remains unclear. We know little of how much is attributable to the cash transfer and how much is attributable to the accompanying conditions. In this paper, I evaluate the effect of an *unconditional* cash transfer program, targeted to children and free of required behaviors, on household investments in children. South Africa's Child Support Grant (CSG) is a relatively new initiative to alleviate child poverty with limited evaluations due to program rules and data availability. In one of the first impact evaluations, I find the CSG to have a significant positive effect among black Africans living in low-income communities.

Introduction

In addition to using cash transfers as a means of short-term poverty relief, recently several social assistance schemes aim to promote social development through human capital accumulation. The schemes make the cash transfer *conditional* on certain behaviors to affect current well-being, as well as intergenerational transmission of poverty by specifically targeting child outcomes. Evaluations of these programs present evidence of success which include better physical growth, lower illness rates, increasing enrollment rates, improved preventive health care, and rising household consumption (Gertler 2004; Gertler and Boyce 2001; Rawlings 2004; Schultz 2000). The uses of conditional cash transfers to promote social development by governments are increasing in prevalence in low and middle-income countries (Rawlings 2004; Das, Do and Ozler 2004), although the marginal benefit of the conditions are still unknown. Since payment is contingent upon health and/or educational behaviors, it is unclear how much of the observed effect is attributable to the cash transfer and how much is attributable to the accompanying health and education-related conditions.

Whether unconditional cash transfers can positively impact human capital indicators, particularly in children, is an open question. Observing an effect on children is contingent upon household adults internalizing returns to investments in a child's human capital. Evidence from the United States suggests that cash transfers to the poor have very little impact on child welfare (Currie 1995; Mayer 1997). However, the effects of cash transfers on child outcomes could be significantly different among poor households in low and middle-income countries, particularly where households are relatively and absolutely poor and the additional resources may translate differently. Previous research in South Africa demonstrates a positive impact of a social old age pension, an unconditional cash transfer, on child health, education, and labor outcomes for children that co-reside with a pensioner (Duflo 2003; Edmonds 2004). This paper estimates the

effect of an unconditional cash transfer targeted to children to examine whether households make investments in children in the absence of conditions that require them to do so.

The Child Support Grant in South Africa

The Child Support Grant (CSG) was introduced across South Africa in April of 1998. Initially, CSG benefits were available to children under 7; however, eligibility was subsequently extended to children under 9 (2003), under 11 (2004) and under 14 (2005). The cash transfer is made to an adult over the age of 16 who takes primary responsibility for meeting the daily care needs of the child. The initiation of the CSG came at the recommendation of the Lund Committee commissioned to evaluate the existing state support system in the first years of the new democratic government. Moved by the literature emphasizing the importance of protecting health in the first few years of life for health and well-being throughout the life-course, the Lund Committee recommended the institution of a cash transfer to promote positive child outcomes in early years. Early discussions considered a mandatory requirement of presenting an up-to-date ‘Road to Health’ card for program application and continuing benefits. The card is part of a system meant to promote child development by providing early warnings of faltering health, while recording immunizations and other indicators of health. Although considered, possession of a Road to Health card is not a condition of receipt of the CSG, nor are there any other conditions.

Because of high child mobility, the Lund Committee recommended that the grant should “follow the child”. Effectively, the Committee recommended a move away from a conventional household-based approach to social assistance, instead to a child-based approach. To ensure that benefits are received in the child’s household of residence, CSG benefits are paid to the person primarily responsible for meeting the child’s daily needs, the so-called primary caregiver (PCG). Eligibility for the grant is based on the child’s age and a means-test of the combined income of the PCG and her/his spouse. The means test is absolutely independent of household structure and total income. To make an application, the child’s PCG must present the child’s birth certificate, his or her state ID card, and verification of income, at a minimum. In cases where the PCG is not the child’s parent, the PCG must file an affidavit made by the child’s parent granting permission for the PCG to file for CSG benefits on behalf of the child. This and other documentation requirements, combined with age-eligibility extensions, seem to have affected program take-up rates.

Identification

The single national eligibility date of the CSG, rather than a phased-in roll-out, presents an immediate challenge to identification of an effect of the grant. There is no random assignment or temporal variation in assignment by region or other observable characteristic to cleanly identify the effect of the CSG. However, the exogeneity of the age and income-eligibility of the grant provides a potential means for identification through the use of quasi-experimental methods. Since, *a priori*, there is no reason to believe that children being cared for by PCGs with incomes just above the line of eligibility should differ systematically from children being cared for by PCGs with incomes just below the line, the exogeneity of the income means test may identify the effect of the grant. This provides rationale for a regression discontinuity approach to

identification, which in essence makes this stated assumption. The key to a regression discontinuity approach, however, is the discontinuity in the probability of treatment based on the assignment criteria. Unfortunately, an inspection of PCG reported incomes of grant beneficiary children indicates some violations to the assignment rule based on income. This, combined with the moderate take-up rates of 40 percent, point to a need to instrument for grant receipt.

I estimate the effect of the CSG using an instrumental variables approach, taking advantage of the exogeneity of age and income-eligibility. Specifically, I estimate the direct effect of CSG benefits on children who are age-eligible for the grant. I also estimate two types of spillover effects. First, I estimate spillovers on children who are age-eligible from grant receipt by other children in the household. Second, I estimate spillover effects on children who are age-ineligible, but who live with an age-eligible child. To estimate the direct effect of CSG benefits I instrument for an individual child's CSG receipt with age and income eligibility. To estimate the spillover effect, I instrument the number of grants in the household, excluding a child's own CSG status, with the number of age-eligible children and the number of adults in the household with an eligible income. Additionally, I instrument the presence of the old age social pension with age-eligibility. The main and spillover effects of the CSG are identified by the following equation:

$$Y_{ij} = \gamma_1 CSG_{ij} + \gamma_2 H_CSG_{ij} + \delta_2 H_OAP_j + W_{ij}\theta + X_j\eta + \omega_{ij} + \alpha_i$$

Where Y_{ij} is a child-specific outcome for child i in household j . CSG_{ij} is an indicator for child i 's grant status instrumented with an indicator for whether child i is age-eligible and an indicator for child i 's PCG's income-eligibility. H_CSG_{ij} is the number of grants in household j , excluding child i 's grant status, instrumented with the number of age-eligible children (excluding child i) and the number of adults with eligible incomes in the household. H_OAP_j is an indicator of receipt for the old age social pension instrumented with the presence of an age-eligible adult in household j . W_{ij} is a vector of child-specific control variables including child age, age squared, sex, PCG's income, age, education, and sex. X_j is a vector of household-specific variables, including household income, rural residence, the number of days since the age extension, household size, and age composition.

Using this approach on one indicator of human capital investment in children, school enrollment, I find a statistically significant positive effect at conventional levels of grant recipient in the gender-pooled sample. When I stratify the sample by gender, I find a significant positive effect at conventional levels of grant recipient on girls, but not boys. I fail to find statistically significant spillover effects on neither children who are age-eligible, nor children who are age-ineligible. The paper will extend to include other child-specific education and health outcomes, including school attendance, school fees paid, basic tests of learning, nutritional status, and illness.

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