University of Natal, Durban, Centre for Social and Development Studies Working Paper 38 Princeton University, Research Program in Development Studies Working Paper 224

The Reach of The South African Child Support Grant: Evidence from KwaZulu-Natal

Anne Case
Princeton University
and Visiting Scientist, Africa Centre for Health and Population Studies

Victoria Hosegood Africa Centre for Health and Population Studies London School of Hygiene and Tropical Medicine

Frances Lund
University of Natal, Durban
and Visiting Scientist, Africa Centre for Health and Population Studies

October 18, 2003 Revised: December 14, 2003

We thank Annamie Vaneste for assisting with the development of the child grant questionnaire, Kobus Herbst of the Africa Centre for Health and Population Studies for data management, and Shirin Motala, Lawrence Haddad, and seminar participants at the School of Development Studies, University of Natal, for helpful comments. Case acknowledges funding from the National Institutes of Health and the MacArthur Foundation. Hosegood acknowledges funding from The Wellcome Trust, UK through grants to the Africa Centre Demographic Information System (ACDIS) (#65377), the Africa Centre (#50534) and V. Hosegood (#61145).

1. Introduction

The end of apartheid in South Africa brought with it the need to reform one component of the system of social assistance for poorer people – that dealing with support to women and children. Under the old regime, a State Maintenance Grant had been awarded by government to help mothers without partners support themselves and their children. The program originally — purposefully — excluded African women and, later, when it was opened to Africans living in some parts of the country, it continued largely to exclude those living outside of urban areas. In 1996 the new government moved to reconfigure this form of support, and in April 1998 started phasing out the State Maintenance Grant, replacing it with a means-tested Child Support Grant. This was to be awarded to the primary care givers of poor children under the age of seven. (A detailed description of these reforms is presented in Lund 2002a.) In early 2002, if a child's parents' or primary care giver's total income did not exceed R1100 per month in rural areas (R800 in urban areas), the primary care giver could receive a monthly amount of R110 per eligible child.

This was the first major change after apartheid in the field of social policy. Its performance is of interest for many reasons. First, it was aimed at reversing the urban bias that had been present in most health, education and welfare programs. In addition, it introduced for the first time the notion that an adult 'primary care giver,' as opposed to a biological parent, could be a beneficiary of a grant aimed at children. Furthermore, while the new government was initially lauded for producing visionary policies to address the legacies of apartheid, it is increasingly being criticized for failures of implementation. (May, 2000, summarizes findings from 13 assessments of sectoral and state institutional performance since 1994.)

In this paper, we use data collected at a demographic surveillance site in KwaZulu-

Natal (KZN) to address these themes. The site is in the Umkhanyakude District, in the northern part of the province. This area is predominantly rural and has high rates of migration. In addition, the area is bearing a heavy disease and death burden, associated with the HIV/ AIDS crisis. It is also very poor. In 2001, 8% of households had piped water inside their dwellings – in contrast to 30% for KZN, and 32% for the country as a whole (Statistics South Africa, Census 2001). Thirty nine percent of households had no toilet facilities on site. Only 50% of households were connected to an electricity grid. Twenty four percent of households reported that their main source of energy for cooking was from electricity, which compares with 48% for households in KZN, and 51% for the country as a whole (Statistics South Africa, Census 2001).

Umkhanyakude is thus precisely the kind of area that the Child Support Grant is intended to reach. The Africa Centre for Health and Population Studies runs a routine census in the demographic surveillance area (DSA). (See Hosegood and Timaeus 2001 for details.) In 2002, it added a module to its census, in which it asked a battery of questions about grants for each child in the approximately 11000 African households in the DSA. These data enable us to address questions such as: Who applies for a Child Support Grant? Are the awards difficult to obtain? Are boys more likely than girls to receive grants? Are grants effective in reaching poor children? Are there poor children not receiving a grant? In the context of the AIDS epidemic, our data can identify whether Child Support Grants appear to be shoring up households that have suffered from a member's illness and death. Importantly, because our data are part of a larger, longitudinal data collection, we have a rich set of information about all children in the demographic surveillance area, their parents, and the households in which they reside, with which to evaluate the reach of the grant.

We will proceed as follows. Section 2 introduces our data and presents an overview of

grant receipt in the Africa Centre DSA. Section 3 presents a more detailed look at the relationship between child and parental characteristics and grant receipt. Section 4 concludes.

2. Child Support Grants in the DSA

Data collected by the Africa Centre in 2002 contained the question: "Since 1998, has any adult member of this household received, is in the process of applying for, or been refused a grant for a child?" Households were also asked "Since 1998, is there any child member of this household for whom an adult who is not a member of this household has applied for, received, or been refused a grant?" For households that answered either question affirmatively, details were collected on the adult grant holder, the child's identity, the relationship of the child to the adult, and the type of grant (Child Support, Foster Care, Care Dependency). In addition, information was collected on the status of the grant at the time of the interview: Had the adult made a first visit, submitted an application, been awarded a grant, received a grant, or had an application denied? In all that follows, we will use the phrase "grant reported" to mean the household informant reported that the child's care giver was at any stage in the process (first visit, submitted an application, awarded, received or denied). We will reserve the phrase "grant received" to refer to an award being received.

11178 households answered the grant questionnaire. Of these, 3615 households reported 6039 grants, with the overwhelming majority (94%) reporting Child Support Grants. The remainder (3% Foster Care Grants, 1% Care Dependency Grants, and a residual without information on type) suggests that, aside from Child Support Grants, grants for children are not generally available to households in the DSA. The rules and procedures for obtaining

¹Of the 587 children under age 18 that we can identify as double orphans (both parents deceased), only 10 percent (58 children) were reported with a Foster Care Grant. The vast

Foster Care and Care Dependency Grants differ greatly from those used to obtain a Child Support Grant. With so few children reported with either of the former two grants, we do not analyze their take-up here. In what follows, we will focus exclusively on the 12865 children under the age of 7 who were resident in the DSA on January 1, 2002, of whom 4684 had a Child Support Grant reported on their behalf. Of these children, 3754 were actively receiving a Child Support Grant. The appendix provides details on the sample used here, and on children who are not followed because they were not resident in the DSA at the time of the survey.

Information on the children under age 7 in the DSA is reported in reported in Table 1, where sample means are presented separately for children for whom a Child Support Grant is not reported (column 1), and those for whom a grant is reported (column 2). For each variable, an asterisk (*) indicates when the difference in sample means is statistically significant. Children for whom a grant is reported are slightly, but significantly, older on average. Their mothers and fathers are on average 1 year older than are those of children for whom a grant is not reported. Indeed, only 3.67% of children in the Child Support Grant system have teenaged mothers, true of 8.65% of children not in the system. This 5 percentage point differential is mirrored in the difference in the fraction of children who were born to teenaged mothers (12 percent of children in the grant system, in contrast to 17 percent of children not in the system). Children for whom a grant is reported are also significantly more likely to be co-resident with their mothers. This difference is quite large: 82% of children for whom a grant is reported are co-resident with their mothers, true of only 67% of children without a grant. Children with a grant reported are almost twice as likely to be paternal

majority (512 children) were not reported with a grant of any type.

orphans (7% versus 4%). For the majority of children, father's status is unknown at the time of the survey. These are fathers who are neither resident nor non-resident household members, and who are not known to be dead. In 97% of all cases where father's status is unknown, he has never been registered in the DSA as the father of this child. Many of the fathers who fall into this category were never known by their children. Others were either not named by the household when their children were registered, or were named but have never been residents of the DSA.

Largely as a consequence of parents being missing, parents' ages are missing for a large fraction of children. In results presented below, when we control for mother's or father's age, we will do so by including a complete set of indicator variables for parents' ages.

Included will be an indicator variable that the parent's age is missing.

Table 1 also reports on the number of assets owned by the households in which children live. In 2001, the Africa Centre collected data on both necessities (e.g., a primus cooker, household furnishings, farm tools), and luxury items (e.g., televisions, VCRs, cars). Table 1 presents averages of the simple sum of assets owned, for children with and without a Child Support Grant. On average, children with a grant live in households that own significantly fewer assets.

More information on Child Support Grants is provided in Figure 1, which presents the fraction of children for whom at least an inquiry was made about a Child Support Grant.

Twenty percent of children under age 1 have had at least an inquiry made on their behalf.

This rises to 40% for children between the ages of 1 and 5, and falls to 30% for children aged 6. Care givers of the youngest children may not yet have learned how to apply for a grant; those of the oldest children may have decided that there were not sufficient months of support left before the child turned 7 (and became ineligible) to justify the effort associated with

obtaining a grant.

More than 80% of all of the children above the age of 1 for whom an inquiry has been made are currently receiving a Child Support Grant. This can be seen in Figure 2, which presents progress through the system, by age. For children less than age 1 for whom contact has been made with the Child Support Grant system, 50% have either made a first visit, or submitted an application. The first two panels of Figure 2 shows that children aged 6 months to 1 year are more likely to be receiving an award (50.4%) than those aged 0 to 6 months (18.8%). A full 86% of 4, 5, and 6 year olds for whom contact has been made are actively receiving a grant. Applications were refused for only 16 children (0.3%) for whom an inquiry was made.

The most dramatic rise in Child Support Grant receipt occurred between 1999 and 2001. This can be seen in Figures 3 and 4, which present the fraction of children in each birth cohort for whom grant receipt is reported for each year from 1998 to 2002, based on the households' reports of the date the child grant was first received on behalf of each child.² With the exception of the youngest children (for whom ease of take-up in 1999 and 2000 is irrelevant), we see more rapid take-up between 2000-2001 than between 1999-2000. The fraction of children at each age in the child grant system appears to plateau at about 40% after 2001. If this continues, it will be cause for concern: in an area as poor as Umkhanyakude, we would expect that the majority of children would receive the grant.

The above patterns show that children for whom inquiries were made have come to receive a Child Support Grant. In addition, we find no evidence of potential care givers being thwarted by the system, once an inquiry has been made. In Figure 5, which provides the

²In reading these graphs, note that, for children aged 0 in 2002, no grants were received in 2000. Grants were received for 7% of these children in 2001, and for 9% in 2002.

cumulative distribution of time-to-receipt, we see that of the 2971 cases for which households could recall dates of first visit and grant receipt, half reported a waiting time of one quarter of a year or less.³ For this reason, we will focus on what predicts which care givers will make an inquiry into a Child Support Grant award, rather than on the receipt of the award itself.

We find no evidence that households are discouraged from applying for more than one Child Support Grant, when there is more than one age-eligible child in the household. Figure 6 presents the relationship between grants reported and the number of children aged 0 to 6 in the household. We find that the number of grants reported rises (roughly) linearly with the number of age-eligible children. This is consistent with a process by which every child is equally likely to obtain an award, regardless of the number of age-eligible children in the household. This result can be quantified using an ordinary least squares regression of the number of grants a household reports, regressed upon the number of children aged 0 to 6 in the household. We find:

Number of grants = 0.03 + 0.35 [Number of children 0 to 6].

Every child appears to have one chance in three of obtaining a Child Support Grant.

Moreover, age-eligible children are 36 percentage points *more* likely to be reported with a grant if at least one other age-eligible child in the household is reported with a grant. This positive relationship could reflect both household need and the presence in the household of a person with the knowledge and energy necessary to secure grants for all eligible children.

The Child Support Grant system identifies a child's primary care giver as the person who has primary responsibility for the child on a daily basis. This person need not be the

³For the 3754 children under age 7 receiving a Child Support Grant, the household informant on the grants questionnaire was the grant holder in 50 percent of all cases. In those cases in which the informant was not the grant holder, it is significantly more likely that details on dates of first visit and first receipt are unknown.

child's mother. Indeed, the care giver need not be a woman. However, in the Africa Centre DSA, 87% of primary care givers are mothers; 10% are grandmothers; and 1% are an aunt of the child. Fathers are designated as primary care givers only 0.2% of the time.

In the DSA, a substantial number are holding grants for more than one child. In our data, 2338 grant holders are reported as holding one grant; 796 are reported holding 2 grants; 174 as holding 3 grants; and 12 as holding 4 grants. Sixty-two women who are multiple grant holders are the mother of at least one child reported with a grant, and the grandmother of at least one other child with a grant. (For example, a 40 year old woman could have a five year old child for whom she is receiving a grant. She may also have a 20 year old daughter, with a child, for whom she is also the grant holder.) Eighteen multiple grant holders are mothers of at least one child with a grant, and an aunt of another. One woman is reported to be the grandmother of two children for whom she is the Child Support Grant holder, and the aunt of two additional children for whom she is the grant holder. With time, we would expect the patterns of grant holding will come to reflect the diversity in care giving observed in South Africa, which preceded the AIDS epidemic but which no doubt is being reinforced by it.

Table 2 presents characteristics of the mothers, grandmothers and aunts who are Child Support Grant holders.⁵ Grandmother grant holders are significantly more likely to be the head or the spouse of the head of household. They have completed significantly less schooling (2.5 years on average, compared with 5.4 for mothers), reflecting the rapid increase in educational attainment between birth cohorts.

⁴There is no limit to the number of grants to which biological parents, or those whose children are legally adopted, are entitled. Primary care givers who are not biological parents are entitled to hold grants for a maximum of six children.

⁵Details on the construction of Table 2 are presented in the appendix.

Our data show that children who do not co-reside with their mothers are at risk for not having a child grant. Figure 7 presents the probability of reporting a Child Support Grant, based on the status of children's parents. The first four bars report grants for children whose mothers are resident in the same *bounded structure* (compound, house, or living area) with the child. Fathers are either resident (bar 1), non-resident (bar 2), dead (bar 3), or have survival status unknown (bar 4), which (as defined above) are fathers who are neither resident nor non-resident members of the household, nor known to be dead. Forty one percent of children with resident mothers are reported in the grant system. This is in contrast to 29% of children with non-resident mothers; 23% with mothers who are dead; and 19% with mothers with status unknown. Holding constant father's status, children with resident mothers were significantly more likely to be in the Child Support Grant system in 11 of 12 comparisons with children whose mothers were not resident.⁶

This finding is important for several reasons. First, it is inconsistent with the popular belief that mothers apply for the grant and then leave their children in someone else's care. In addition, it is consistent with earlier evidence that children living apart from their mothers face special risks. Household expenditure in both the US and South Africa on child-related goods—in particular, on healthy foods—is lower when a child's birth mother is absent (Case et al 2000). Mothers in the US have been observed to invest more than other care givers in children's health (Case and Paxson 2001). With the AIDS crisis in South Africa, many

⁶These are statistical tests for the differences in grant reports for children whose mothers are resident, for a given father status, versus mothers non-resident, given the same father status; mothers dead, for the same father status; and mothers status unknown, given the same father status, where father's status is either resident, non-resident, dead or unknown. The exception occurs for (mother resident, father resident) relative to (mother non-resident, father resident). In that case, children with mother resident were more likely to be reported with a Child Support Grant, (44 percent versus 38 percent), but the difference is not significant at the 1 percent level.

children are at risk of mother dying.

Primary care givers may not believe themselves to be eligible for a grant if they are not the biological mother of an age eligible child. While we cannot examine this directly in the data collected by the Africa Centre, we can take an indirect look by analyzing whether there are differences in maternal and non-maternal grant holders in their reports of how they first heard about the grant. If non-maternal grant holders are more likely to report having heard about the program from a source that emphasized their eligibility (government radio spots, welfare offices, for example), we might assume that they had better information than the population as a whole. However, we find no difference in maternal and non-maternal grant holder reports on how they heard about the grant, with 54% having heard from family and friends, and 36% having heard from a government radio spot. It will be important to examine more closely why the absence of children's mothers leads to significantly lower probabilities of Child Support Grant receipt, to make sure that these children are not left behind.

In summary, we find that children in this area of rural KwaZulu-Natal are reported to be participating in the Child Support Grant system in large numbers. Half of all respondents who made contact with the grant system recall receiving a grant within three months of having made a first visit to the grant office. This is consistent with our finding that over 80% of children above age 1 who had had an inquiry made on their behalf into a Child Support Grant are receiving a grant.

3. Child, Parent and Household Characteristics

We add to our analysis information available about the children in the DSA, their parents, and the households in which they are resident. Table 3 quantifies some of the results of Section 2.

Here we present, from probit regressions, changes in the probability of reporting a Child Support Grant for a child, given the child's age and sex, the number of members in the child's household, and the number of non-resident household members, together with an asset index, which is the simple sum of the number of assets the household owns. Sample means for each control variable are presented in brackets. Consistent with the figures presented in Section 2, we find that children aged 1 to 5 are 20 to 25 percentage points more likely to report a Child Support Grant than are children less than 1 year in age (the reference category).

Table 3 shows that, while household size is not significantly associated with reporting a grant, household structure is. In column 2, where we control for the same parental residential and vital status indicators that underlie Figure 7, we find that parents' status indicators are highly jointly significant predictors of reporting a grant (chi-square test = 487.6, p-value= 0.0000). In all probit results that follow, we control for indicators of children's ages and sex, the number of household members and the number of non-resident members.

With or without controls for parents' status, girls appear to be at no disadvantage for a Child Support Grant. In this and the analysis that follows, an indicator that the child is a girl is never a significant predictor of a grant report. This is consistent with the lack of bias found against girls in other areas, such school enrollment (South African Government, Findings from Census '96).

The means tested grant was designed to go to children in poorer households. Two questions about targeting arise. First, are poorer people prevented from applying because of costs associated with doing so, such as transport for repeated visits to government offices, or the costs of getting documentation in order? Alternatively, given that nearly all who apply for

⁷For example 13.2 percent of the sample is aged 1 year. 49.8 percent of the sample are girls. On average, children live in households with 2.3 non-resident members.

the grant do come to receive it, might officials be disbursing the grant without screening for means? Our data shed some light on these questions. At the time of the survey, information was not available on parents' incomes, which limits our ability to examine how closely the means test was followed. However, we find that ownership of assets significantly reduce the probability of reporting a Child Support Grant, with each additional asset associated with a reduction in the probability of child support of 0.5 percentage points (asset index, Table 3).

We bring more detailed data to bear on this question in Table 4. Here, we present the results from a probit regression in which reports on Child Support Grants are regressed on a set of indicator variables for luxuries owned. These include a refrigerator, a geyser, a washing machine, a television, a VCR, a computer, and a car. Controlling for a child's age, sex, household size and composition, and parents'status, we find that several luxuries are negatively and significantly associated with reporting a Child Support Grant. The presence of a geyser reduces the probability of reporting a grant by 20 percentage points, while a VCR or computer each reduce the probability by 15 percentage points. These effects are large, considering that 36 percent of children less than age 7 are reported with an award: all else held equal, the presence of a VCR or computer reduces the probability of a Child Support Grant by almost 50 percent. Owning a car is also negatively and significantly associated with reporting a child grant. Indicators for this set of luxury durable goods are highly jointly significant (chi-square test = 132.2, p-value = 0.0000). We take this as evidence that the grant is targeting children in poorer households.

In Table 5, we look more closely at whether a child's mother's characteristics predict the report of a Child Support Grant. The sample for Table 5 is restricted to children for whom it is known that mother was alive on 1st January 2002, the reference date for the analytical data sets used in this study. Thus, the survival status of mothers who were registered by

ACDIS on that date can be established, even if she was no longer a member of the same household as her child.

In the probit regressions run for Table 5, we control for (but do not report results for) a complete of child age indicators, child's sex, household size and composition, and the number of assets owned. In addition, we include a complete set of indicator variables for mother's age, including an indicator variable that mother's age is not known. Results in Table 5 suggest that mother's education and employment status play a significant role in child grant reports. Relative to children whose mothers have completed at least standard 10/grade 12 (the reference category), children whose mothers have less education are 6 to 10 percentage points more likely to report a grant. Recognizing that 36 percent of all age-eligible children are reported with a grant, this suggests that children whose mothers are less well educated are 16 to 28 percent more likely to be reported with a grant. Children whose mothers are not employed are 14 percentage points (almost 40 percent) more likely to report a grant than are those whose mothers are reported to be working full-time (the reference category). Many mothers working full-time may earn too much to be eligible for the Child Support Grant. Our results in Section 2 showed that mothers are overwhelmingly the child's primary care giver with respect to the Child Support Grant. The results in Table 5 suggest that it is the poorer, less well educated mothers who are more likely to be reporting a grant on behalf of a child. These results are robust to the inclusion of information on father's status, results for which are presented in column 2.

Results in column 1 also suggest that mothers' marital status is a significant predictor of reporting a Child Support Grant. In the absence of information on father's status, an indicator that the child's mother is separated, divorced or widowed is positively and significantly correlated with reporting a child grant. That this effect is working entirely

through children whose fathers have died can be seen by comparing the results in columns 1 and 2, where controls are added for father's status. Children whose fathers have died are 13 percentage points more likely to report a child grant. Once an indicator is included that father is deceased, the variable indicating mother's marital status as separated, divorced or widowed becomes small and insignificantly different from zero. Consistent with the results presented in Figure 7, results in Table 5 suggest that widows are significantly more likely to apply for a Child Support Grant than are women who are married (the reference category here). Women who are married are, in turn, significantly more likely to apply than are women who are not married. Children with unmarried mothers are 5 percentage points less likely to report a grant than are children of married women. Understanding this result requires further investigation. It is unlikely it is driven by mother's age, education, employment status or the status of the child's father, as all of these are being controlled for in Table 5.

We turn in Table 6 to the relationship between father's characteristics and Child Support Grants. Our sample for Table 6 is restricted to children whose fathers were known to be alive on 1st January 2002. In the probit regressions run for Table 6, we control for a complete set of child age indicators, child's sex, household size and composition, and the number of assets owned. In addition, we include a complete set of indicator variables for father's age, including an indicator variable that father's age is not known. As was true for their mothers, children with less well educated fathers are significantly more likely to be reported in the Child Support Grant system. Relative to children whose fathers have at least a standard 10/grade 12 education (the reference category), children whose fathers have less than a standard 7 education have roughly a 15 percentage point higher probability of a grant, all else held equal. Children with fathers who are not employed are also significantly more likely to be reported in the child grant system. This provides more evidence that the Child Support

Grant is reaching poorer children in the community.

While mothers' and fathers' socioeconomic characteristics have similar effects on Child Support Grants, there are important differences in the effects of parents' status. When a child's mother is not resident in the household (the reference category in column 2 of Table 6), children are significantly less likely to be reported with a grant. This is true for non-resident mothers (13 percentage points less likely); deceased mothers (16 percentage points), or mothers who are not household members and who are not known to be deceased (18 percentage points). This, again, suggests more attention be paid to the special needs of children whose mothers are absent. In future work, we plan to examine in greater detail the structure and characteristics of households in which children are living without their mothers.

4. Conclusions

The reach and impact of other aspects of South African state social assistance — in particular, the success of the state old age pension — have been well documented (Lund 2002, Case and Deaton 1998). In early 2002, when this survey was conducted in the DSA, it was too early to address questions of impact, such as the effect of the Child Support Grant on nutritional status, or on school attendance. However, with the ACDIS child grant data, we are able to document its reach in a signal area of rural KwaZulu-Natal. We find that 36 percent of all children under the age of 7 have had some contact with the Child Support Grant system, with no difference in contact for girls and boys. Between 80 and 90 percent of children ages 1 through 6 who have had contact with the system were receiving a grant in 2002. That, in the fifth year of the grant, it was reaching fully a third of age-eligible children in this remote rural area, half of whom received a grant within 3 months, shows a real commitment to implementation.

Is the grant well-targeted for poverty? In the absence of income data, we have relied on other measures — parents' education and employment and household asset ownership — to assess the program's success. Children for whom the grant is being obtained have parents who are less well educated, and parents who are less likely to be employed. They live in households that own fewer assets generally, and fewer luxury items in particular. It is likely that the modest size of the cash transfer is leading to a form of self-selection, where better off primary care givers are not bothering to go through the application process. Children whose fathers have died are significantly more likely to be receiving a grant. Households with greater numbers of children age-eligible to receive the grant report receiving a larger number of grants, on average.

These signs of effective targeting are tempered, however, by the fact that the probability that a child receives a grant depends in large part on the presence of a child's mother. Although a child who has lost a father is significantly more likely to receive a grant, this is not true for children who have lost a mother. In fact, children whose mothers are non-resident, or dead, or whose survival status is unknown, are significantly less likely to receive a grant, holding constant the child's father's status. Lack of widespread knowledge of the fact that primary care givers need not be mothers provides a possible explanation for our finding. Furthermore, when a mother is absent, the child's primary care giver may be less able to access the relevant documents necessary for registering the child's birth. The Child Support Grant is currently being extended to children aged 7 to 14, who are even less likely than younger children to be residing with their mothers. This makes a better understanding of this phenomenon essential.

References

Case, Anne and Angus Deaton. 1998. "Large Cash Transfers to the Elderly in South Africa," *Economic Journal* 108(450): 1330-1261.

Case, Anne, I-Fen Lin and Sara McLanahan. 2000. "How Hungry is the Selfish Gene?" *Economic Journal* 110(466): 781-804.

Case, Anne and Christina Paxson. 2001. "Mothers and Others: Who Invests in Children's Health?" *Journal of Health Economics* 20: 301-328.

Hosegood, Victoria and Ian M. Timaeus. 2001. "Household Composition and Dynamics in KwaZulu Natal, South Africa: Mirroring Social Reality in Longitudinal Data Collection," paper presented at the African Census Analysis Project Virtual Conference on *African Households: an Exploration of Census Data*, 21-24 November 2001. http://www.lshtm.ac.uk/dfid/2002 105.htm.

Lund, Frances. 2002a. *Consensus and Contestation: The Policy for Child Support in South Africa*, Draft Monograph, School of Development Studies, University of Natal..

Lund, Frances. 2002b. "Crowding In Care, Security and Macro-enterprise Formation – Revisiting the Role of the State in Poverty Reduction, and in Development," *Journal of International Development* 14(6): 681-94.

May, Julian. 2000. "Policy Conclusions," Chapter 10 in *Poverty and Inequality in South Africa: Meeting the Challenge*, Julian May (editor), Cape Town: David Philip, 260-275.

South African Government, "Education in South Africa: Selected Findings from Census '96," http://www.polity.org.za/html/govdocs/reports/education/edustats.html .

Statistics South Africa, *Census 2001. Census in Brief.* Pretoria: Statistics South Africa. http://www.statssa.gov.za.

Appendix.

Sample selection

The number of households we report as answering the grant questionnaire (11178) excludes one observation for a household that no longer existed at the time of the survey.

In 6075 cases, informants answered affirmatively one or both of the following questions: "Since 1998, has any adult member of this household received, is in the process of applying for, or been refused a grant for a child?" and "Since 1998, is there any child member of this household for whom an adult who is not a member of this household has applied for, received, or been refused a grant?" For households that answered either question affirmatively, details were to be collected on the adult grant holder, the child, and the type of grant. Information was reported for 6039 of these 6075 cases, in response to the questions "Is the adult [primary care giver] registered in the DSA?" "Is the child registered in the DSA?" and "What type of grant was received?" Of these 6039 grants, child identifiers were recorded for 5940 cases. (Without child identifiers, we cannot match the grant to a child and, for this reason, those children without child identifiers are not analyzed here.) Of the 5940 children with identifiers, the child identifier reported in the grants module did not match that of any individual registered in the DSA data base on January 1st 2002 for 117 grants, reported for 115 individuals. These are also removed from our analysis. Of the 5823 cases remaining, 396 grants were reported for 387 individuals who were not resident in the DSA on January 1st 2002. (We provide information on these children below.) Of the 5427 cases remaining, multiple households reported grants for 157 children (150 children appear twice, 7 children appear 3 times). For this analysis, we assigned children appearing multiple times to exactly one household, using the following assignment rule. If the child had multiple memberships at the time of the survey, we assigned the child to the bounded structure in which he or she was resident. For those children for whom this did not provide a unique observation, we assigned children to households based on a match between the household assigned to this child in the household memberships file with that recorded in the grant questionnaire. (Details are available from the authors on this procedure.) Of the 5263 children resident in the DSA at the time of the survey for whom a grant is reported, we focus on the 4684 children less than age 7 for whom a Child Support Grant is reported.

Non-resident children

Children non-resident in the DSA are not analyzed here, because we have no information on the households in which they are living at the time of the survey. These children look similar to resident children for whom grants are reported, along some dimensions, including the distribution of their ages, their mother's and father's educations, mother's employment status, and the probability that their fathers were dead. For these children, mothers are significantly less likely to be the grant holder (5.1 percentage points less likely than is true of resident children for whom a grant is reported), and grandmothers and aunts are significantly more likely to be reported as the grant holder (3.4 and 1.7 percentage points respectively). Non-resident children are 8.2 percentage points less likely to have siblings under age 10 who are household members.

Grant holder characteristics

Grant holders are not identified for 184 of the 4684 children under age 7 reported with a Child Support Grant. A total of 3320 individuals are identified as holding the 4500 grants for which a grant holder is named. Grant holders may be members of one or multiple households. We find 3187 grant holders reported as members of one household; 99 as members of two; and 2 as members of three households. 32 grant holders are not reported as members of any household in the DSA in January 2002, and thus information on their relationship to the household head is not recorded. In constructing Table 2, we assigned grant holders "head of household" status if they were recorded as the head of at least one household in which they were a member. Similarly, we conferred "spouse of head," "child of head," and "parent of head" status on a grant holder if they held this status in any household in which they were reported to be a member.

Table 1. Mean characteristics of children less than age 7 in the $DSA^{\rm a}$

	Children for whom a Child Support Grant is not reported	Children for whom a Child Support Grant is reported
Age	3.08	3.18*
Proportion female	0.50	0.50
Mother's age	29.3 [n=6856]	31.0* [n=4356]
Mother is less than 20 years old	.087	.037*
Mother was less than age 20 at the child's birth	0.17	0.12*
Father's age	38.3 [n=3058]	41.4* [n=1942]
Mother and child are both resident members of the same bounded structure ^b	0.67	0.82*
Mother is a non-resident member of child's bounded structure	0.14	0.10*
Mother is dead	0.04	0.02*
Mother is neither a resident nor non-resident member, nor is mother known to be dead	0.16	0.06*
Father and child are both resident members of the same bounded structure	0.20	0.24*
Father is a non-resident member of child's bounded structure	0.16	0.16
Father is dead	0.04	0.07*
Father is neither a resident nor a non-resident member, nor is father known to be dead	0.60	0.52*
Mother, father and child are all resident members of the same bounded structure	0.16	0.22*
Number of assets owned by household	7.85 [n=7400]	7.59* [n=4352]
Number of observations ^c	8181	4684

Notes to Table 1.

- a. Sample is restricted to those children resident in the DSA on January 1, 2002 for whom a household identifier is known. See appendix for details. Asterisks (*) denote that the difference in means between the two samples is significant at the 1% level.
- b. A *bounded structure* is a compound, house or living area used to define residency in the DSA.
- c. Numbers of observations are given at the bottom of each column, with the exception of mother's and father's ages, and number of assets owned by the child's household variables for which there are missing values. Numbers of observations in these cases are given in square brackets.

Table 2. Mean grant holder characteristics^a

	Grant holder:		
	Mother	Grandmother	Aunt
Age	32.3	52.1*	32.3
Years of completed schooling	5.4	2.6*	6.1
Grant holder's relationship to household head:			
Self	7.8	29.7*	8.3
Spouse	32.3	46.9*	10.4*
Parent	0.5	9.8*	0.0
Child	28.6	3.8*	47.9*
Number of observations	4090	439	50

Notes to Table 2.

a. Sample is restricted to children resident in the DSA on January 1, 2002. See appendix for details. Asterisks (*) denote that the difference in means between mother grant holders and other grant holders is significant at the 1% level. Relationship to head percentages do not sum to 100% because we have excluded many small categories.

Table 3. Child characteristics and the probability of reporting a Child Support Grant^a

	benan of this child	
Explanatory variables: [sample means]	Without controls for parents' status	With controls for parents' status
Indicator: age = 1 year [.132]	.234 (.019)	.246 (.019)
Indicator: age = 2 years [.138]	.229 (.019)	.250 (.019)
Indicator: age = 3 years [.142]	.238 (.018)	.267 (.019)
Indicator: age = 4 years [.154]	.230 (.018)	.257 (.019)
Indicator: age = 5 years [.149]	.204 (.018)	.231 (.019)
Indicator: age = 6 years [.154]	.106 (.019)	.133 (.019)
Sex = female [.498]	002 (.009)	005 (.009)
Number of household members [11.24]	.002 (.001)	.001 (.001)
Number of non-resident household members [2.31]	018 (.003)	007 (.003)
Asset index [7.76]	005 (.001)	005 (.001)
Chi-square test for parents' status (p-value)		487.60 (.0000)
Number of observations	11744	11744

Notes to Table 3.

a. Probit estimates. The numbers reported are changes in the probability of reporting a grant, given a change in the right side variable presented. Standard errors for these changes are reported in parentheses. The reference category for age is children less than age 1. The reference category for sex is a male child. Sample is restricted to children younger than age 7 resident in the DSA on January 1, 2002.

Table 4. Household assets and the probability of reporting a Child Support Grant^a

Denail of this child	
Explanatory variables: [sample means in brackets]	
Indicator: household owns a refrigerator [.455]	.007 (.011)
Indicator: household owns a hot water heater (geyser) [.014]	202 (.031)
Indicator: household owns a washing machine [.004]	091 (.068)
Indicator: household owns a television [.362]	005 (.011)
Indicator: household owns a VCR [.063]	150 (.018)
Indicator: household owns a computer [.005]	141 (.060)
Indicator: household owns a car [.125]	039 (.014)
Chi-square test for the joint significance of these assets (p-value)	132.20 (.0000)
Number of observations	11736

Notes to Table 4.

a. Probit estimates. The numbers reported are changes in the probability of reporting a grant, given a change in the right side variable presented. Standard errors for these changes are reported in parentheses. Included in the probit are age and sex indicators, household size and number of non-resident members, and a complete set of indicator variables for parent's status. Sample is restricted to children resident in the DSA on January 1, 2002.

Table 5. Maternal characteristics and the probability of a Child Support Grant^a

belian of this emid		
Explanatory variables: [sample means]		
Indicator: mother is separated, divorced or widowed [.036]	.150 (.029)	.049 (.036)
Indicator: mother is not married [.703]	035 (.014)	049 (.015)
Indicator: mother's completed schooling is less than standard 6 [.449]	.053 (.015)	.057 (.015)
Indicator: mother's completed schooling is between standard 7 and 9 [.270]	.096 (.015)	.098 (.015)
Indicator: mother is employed part-time [.035]	.056 (.029)	.056 (.029)
Indicator: mother is not employed [.663]	.133 (.012)	.135 (.012)
Indicator: father is a non-resident household member [.154]		041 (.016)
Indicator: father is dead [.049]		.128 (.031)
Indicator: father is neither a resident nor non-resident household member, nor is he known to be dead [.580]		007 (.015)
Complete set of indicator variables for mother's age included?	Yes	Yes
Number of observations	10403	10403

Notes to Table 5.

a. Probit estimates. Reported are changes in the probability of reporting a grant, given a change in the right side variable presented. Standard errors for these changes are reported in parentheses. The reference category for mother's education is completion of standard 10 or higher. The reference category for mother's employment is employed full-time. The reference category in columns 2 and 3 for father's status is resident father. Sample is restricted to children resident in the DSA on January 1, 2002 whose mothers are known to be alive on 1st January 2002. Included in the probit are age and sex indicators, household size and number of non-resident members, and a complete set of indicator variables for parent's status. Where mother's marital status, or education or employment status are unknown, the mother is assigned the mean marital status, education, or employment status for all mothers, and variables are included indicating that mothers marital status, education, or employment status has been assigned.

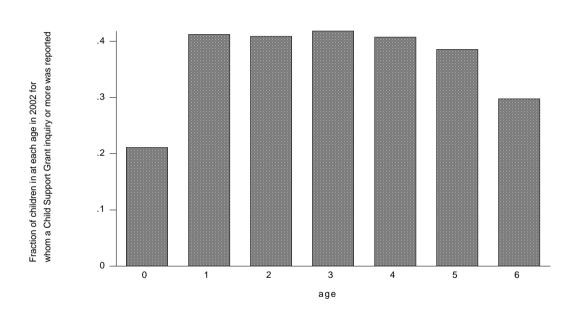
Table 6. Paternal characteristics and the probability of a Child Support Grant^a

Explanatory variables: [sample means]		
Indicator: father is separated, divorced or widowed [.013]	275 (.040)	225 (.055)
Indicator: father is not married [.464]	080 (.018)	057 (.018)
Indicator: father is polygamous [.053]	.006 (.037)	013 (.178)
Indicator: father's completed schooling is less than standard 6 [.573]	.152 (.022)	.136 (.023)
Indicator: father's completed schooling is between standard 7 and 9 [.193]	.136 (.026)	.124 (.026)
Indicator: father is employed part-time [.044]	.063 (.038)	.061 (.038)
Indicator: father is not employed [.335]	.121 (.017)	.125 (.017)
Indicator: mother is non-resident [.044]		125 (.034)
Indicator: mother is dead [.016]		158 (.058)
Indicator: mother is neither a resident nor non-resident household member, nor is she known to be dead [.160]		176 (.022)
Complete set of indicator variables for father's age included?	Yes	Yes
Number of observations	4583	4583

Notes to Table 6.

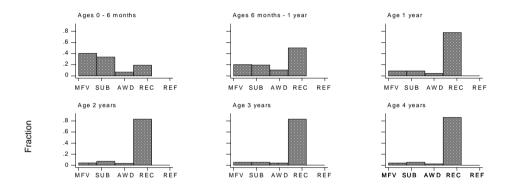
a. Probit estimates. Reported are changes in the probability of reporting a grant, given a change in the right side variable presented. Standard errors for these changes are reported in parentheses. The reference category for father's education is completion of standard 10 or higher. The reference category for father's employment is employed full-time. The reference category in columns 2 and 3 for mother's status is resident mother. Sample is restricted to children resident in the DSA on January 1, 2002 whose fathers are known to be alive on 1st January 2002. Included in the probit are age and sex indicators, household size and number of non-resident members, and a complete set of indicator variables for parent's status. Where father's marital status, or education or employment status are unknown, the father is assigned the mean marital status, education, or employment status for all fathers, and variables are included in both probits indicating that father's marital status, education, or employment status has been assigned.

Figure 1. Fraction of resident children for whom an inquiry about a Child Support Grant is reported



Households report having had contact with the Child Support Grant system for 36 percent of children aged 0 to 6 years old.

Figure 2. Child support grant status, by age, Resident children aged 0 to 5



For those children reported to have had contact with the child support grant system, the graphs above present the stage to which the application process had advanced by 2002. Shown separately by age are:

MFV: the fraction for whom only a first visit has been made (6.8% over all children < age 7);

SUB: an application has been submitted (7.8%);

AWD: an award has been made, but not yet received (3.6%);

REC: the grant has been received (80.2%);

REF: the application was refused (0.3%).

Results for 5 and 6 year olds (not shown) look very similar to those for four year olds.

Not shown are a small number of children for whom it is reported that the grant has been stopped.

Apart from the youngest children (less than 1 year olds), for whom first visits and submissions

comprise 50 percent of experience with the system, the vast majority of children are receiving a child support grant.

Figure 3. Receipt of a child support grant for resident children who were aged 0 to 3 years old in 2002



Figure 4. Receipt of a child support grant for resident children who were aged 4, 5 or 6 years old in 2002

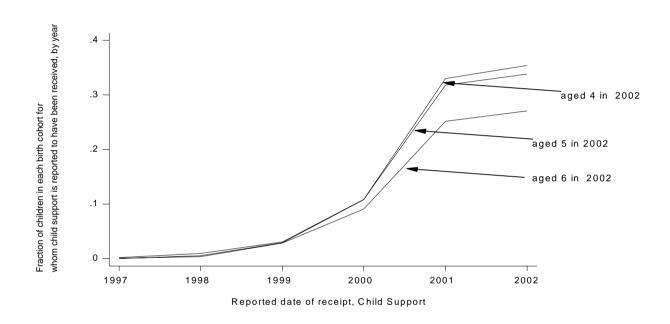


Figure 5. Time to receipt of a Child Support Grant for resident children

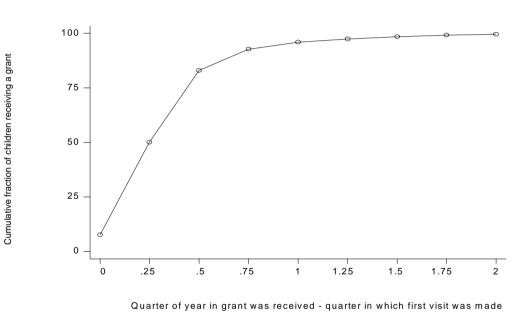
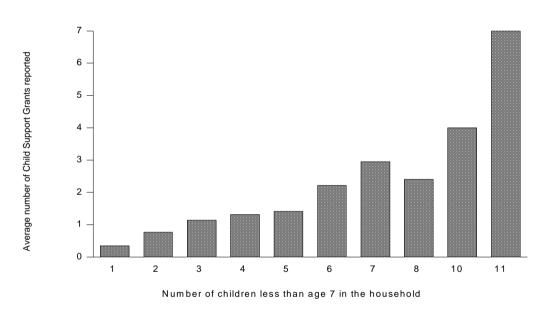


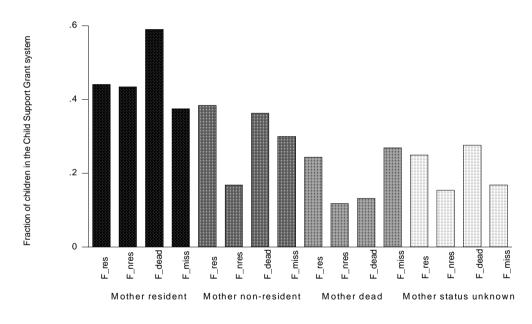
Figure 6. Number of Child Support Grants reported per household, with averages presented by numbers of children less than age 7 resident in the household



On average, the relationship between number of grants reported by the household and the number of children less than age 7 can be summarized:

Number of Child Support Grants = 0.03 + 0.35 [Number of children less than age 7]

Figure 7. The probability of reporting a Child Support Grant, presented by status of a child's mother and father



Reported are the probabilities of reporting a Child Support Grant, based on the vital status of a child's parents.

The first four bars report grants for children whose mothers are resident in the same bounded structure with the child. Fathers are either resident (bar 1), non-resident (bar 2), dead (bar 3), or status unknown (bar 4). 41% of children with resident mothers are reported in the grant system. This is in contrast to 29% of children with non-resident mothers; 23% with mothers who are dead; and 19% with mothers whose status is unknown (mother is not a resident member, nor a non-resident member of the household, nor is mother known to be dead). Holding constant father's status, children with a resident mother were significantly more likely to be in the child support grant system in 11 of 12 comparisons. The exception occurs for (mother resident, father resident) relative to (mother non-resident, father resident). In that case, children with mother resident were more likely to be reported with a child support grant, (44 percent versus 38 percent), but the difference is not significant at the 1 percent level.