

Can Africa Afford Child Support Grants? Simulation Analyses from 4 Countries

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Summary

Targeted cash transfers, small predictable transfers to impoverished households, are an important part of the contemporary policy dialogue in Sub Saharan Africa as a way to protect the human capital of children and to mitigate the impact of prime-age adult mortality due to AIDS. Proponents of social protection as a human right argue that grants to vulnerable groups such as children or the elderly ought to be part of the core basic services provided by the nation state to its vulnerable citizens. Targeting and relative costs are two important elements of the debate on cash grants in the face of limited budgets and the progressive realization of rights that are not currently enshrined in national legal documents. This paper compares the costs and potential benefits of ‘universal’ cash grants to children and the elderly in Malawi, Mozambique, Uganda and Zambia using national expenditure surveys and micro-simulations. Universal grants to children are more expensive than those to the elderly because there are more children in these countries, but costs never exceed more than 1.7 percent of GDP in even the most expensive scenario. But children are poorer and live in larger households, so universal grants to children have larger poverty effects, and reach more indirect beneficiaries, both compelling cases for beginning the progressive realization of basic social protection with families with young children in countries where budgets are limited and progressive spending is valued.

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1. Introduction

Social cash transfers (CTs), small predictable sums of money to poor and vulnerable families, are a relatively new social protection instrument in East and Southern Africa (ESA). However this instrument is rapidly gaining popularity as an effective intervention to enhance the participation of the poor in economic development, and to combat inequality, social exclusion and chronic poverty. In the HIV and AIDS policy dialogue in particular, the 'protective' dimension of programming in the 4 Ps increasingly calls for the use of social cash transfers to support families that care for orphans and other children affected by AIDS (UNICEF AND UNAIDS 2004). Advocacy among AIDS scholars for such programs is driven by the fact that AIDS is the number one cause of prime-age mortality in sub-Saharan Africa (SSA), and the region hosts approximately 25-30 million orphans, one third of whom have lost a parent to the disease. AIDS related prime-age adult mortality has seen life expectancy rates decline dramatically in the region, and has severely weakened family support systems already stretched thin by extreme chronic poverty. In this context, CTs are increasingly being called for as an AIDS mitigation measure, to help families cope with increasing dependency ratios and the associated burden of care, and to protect the health and human capital development of orphans and other vulnerable children (OVC).

Beyond the economic and poverty related benefits of CTs, an important argument for CTs lies on the notion that social protection ought to be part of the basic package of services that governments are obliged to provide to their citizens to ensure a minimum acceptable standard of living. The 'rights-based approach' to social protection points out that access to social protection is explicitly mentioned in the international covenants that African countries are state parties to, including the Universal Declaration on Human Rights (UDHR), the Convention on the Rights of the Child (CRC), and the African Charter on the Rights and Welfare of the Child (see UNICEF 2008 for exact citations within these documents). Universal grants of the kind envisioned in these covenants currently exist in the relatively well-off countries in Southern Africa. South Africa for example has a universal old-age pension (OAP) and child

support grant (CSG), and OAPs exist in Lesotho, Botswana and Namibia as well. Targeted CTs to vulnerable groups exist in a number of countries including Mozambique (Programa Seguranca Alimentar or PSA), Ethiopia, Namibia, and Botswana, and smaller scale government programs exists in Kenya, Malawi, Ghana and Zambia. Several other countries are currently considering implementing CTs on a trial basis including Rwanda, Tanzania, and Uganda.

As momentum gathers around CTs, a host of technical questions arise on program design parameters such as targeting, transfer levels, and overall costs and affordability. From a rights-based perspective and given limited budgets, two obviously vulnerable but distinct groups have dominated the policy dialogue: the elderly and children. At the moment, targeted CTs have tended to focus on child vulnerability (and orphan hood in particular) and focused resources on families that are thought to contain vulnerable children (Kenya, Malawi, Botswana, Namibia). Universal social grants on the other hand have tended to focus on the elderly with the sole exception of South Africa which provides universal grants to both groups. The human rights approach to programming acknowledges that rights may be realized progressively, and advocates that such progressive realization begin with the most marginalized. Thus, in the face of limited budgets and competing interests, which of these two vulnerable groups should governments begin with? This paper provides important information for policy-makers faced with this decision. Using national household survey data and micro-simulations, we provide estimates of the cost, number of recipients, and poverty impacts of OAPs and CSGs in 4 countries: Malawi, Mozambique, Uganda and Zambia.

2. Methodology

Nationally representative household expenditure surveys from 4 Eastern & Southern Africa (ESA) countries, Malawi, Mozambique, Uganda and Zambia, are used to compare the costs, reach and poverty impacts of alternative universal social grants. We assess 6 different social grant schemes. For CSGs, we simulate grants for 3 age categories (age 5 and under, age 10 and under, and age 17 and under), while for the OAP we also simulate grants for 3 different age categories (age 75+, age 70+ and age 65+). Analysis of each strategy in each country yields results relative to a baseline assumption of having no program; comparison of the results across

schemes allows inference to be drawn regarding each one's performance against specific policy objectives. The policy objectives of interest are the total cost of the scheme, total number of participants, both direct and indirect, and the progressivity of the scheme. Indirect beneficiaries are defined as individuals who reside in the same household as a recipient but who is not an actual recipient.

2.1 Program parameters

A social grant must strike a balance between providing sufficient resources to pursue a policy objective and avoiding distortion of consumption patterns. In this study we set the daily per person transfer level to 10 percent of the national (daily) poverty line. We consider this a 'low scenario' and have also experimented with a 15 percent and 20 percent transfer level, which essentially inflates costs proportionately but have larger poverty impacts. The analysis in UNICEF-ESARO (2008) indicates that average transfer levels for CT programs in Latin America and Africa as a percentage of the national poverty line range from about 20-30 percent in the relatively richer Latin American countries down to about 10-15 percent in the Africa programs. The UNICEF study further notes that because the African programs tend to focus resources on the poorest of the poor whose consumption is half (or less) of the poverty line, those transfers likely represent about 30 percent of the average consumption of recipients, and so are similar in relative terms to the transfer levels in Latin America. Thus it seems to us that 10 percent of the national line is consistent both with international experience and what is currently occurring in Africa.

While a 'universal' grant is ideally what we simulate, in practice we recognize that 100 percent universal coverage is unlikely due to supply side capacity constraints as well as demand side factors such as the fact that the very wealthiest may not sign up for the grant. We thus restrict the grant to eligible individuals in the bottom 8 deciles of the per capita consumption distribution (thus excluding the wealthiest two deciles), though we recognize that the supply side constraint is more likely to affect the poorest deciles rather than the richest. Our poverty impacts thus represent the best case scenario, which as we argue below, results in an over-estimate of the (positive) poverty impact of the OAP since the elderly are more likely to be in

the top two deciles relative to children. Finally, we cap the grant to 3 per household—no household can receive more than 3 grants—in recognition of economies of scale in consumption at the household level. Again, this assumption under-estimates the poverty impact of a CSG because children are more likely to live in households with more than 2 other children, while pensioners rarely live in households with more than 2 other pensioners.

2.2 Efficiency of alternative targeting strategies

Upon identification of recipient households, the number of individuals who would benefit from the grant is estimated using household or population weights, as appropriate. These results are used to estimate changes in the poverty headcount ratio (H), poverty gap ratio (PG), and squared poverty gap ratio (SPG) that would result from a specific targeting strategy. These measures are calculated by the following formulas. The headcount poverty ratio measures the proportion of the population living below the poverty line:

$$H = \frac{\sum h_i}{\sum i} \quad (1)$$

where i represents individuals in the population and h is an indicator that the individual's per capita consumption is below the poverty line. Summations for all three measures are over i , or across the population represented by the household sample. In practice, these measures are derived using population weights calculated as the product of household size and sample household weight. The poverty gap ratio, which measures the proportional difference between per capita consumption and the poverty line for those in poverty, is calculated by:

$$PG = \sum \left[h_i * \frac{(povline - pc_i)}{povline} \right] \quad (2)$$

where *povline* is the poverty line in each country and *pc* is *per capita* consumption for the individual i . Finally, the squared poverty gap ratio is:

$$SPG = PG^2 = \sum \left[h_i * \frac{(povline - pc_i)}{povline} \right]^2 \quad (3)$$

which places greater emphasis on the welfare of individuals in the poorest households, by adding emphasis in the calculation to larger gaps in the difference between their *per capita* consumption and the poverty line. A decrease in any of the three measures represents an improvement in poverty.

We believe that the overall progressivity of each scheme is an important criteria for policy-makers and development partners when deciding among alternative grants that can be justified on human rights grounds. Thus the efficiency of alternative targeting strategies is also assessed by estimating the mean increase in consumption of actual recipient households, and the share of recipient households in the bottom 3 deciles of the per capita consumption distribution. *Ceteris paribus*, we hypothesize that policy makers and development partners would be interested in implementing a program whose benefits are more progressively distributed, thus reducing inequality and poverty by more than the alternative, less progressive program.

3. Data and summary statistics

Household income and expenditure surveys from Malawi, Mozambique, Uganda and Zambia are used for empirical analysis of the analysis. Specifically, they are the Second Integrated Household Survey (IHS) from Malawi (2004); the *Inquerito aos Agregados Familiares* 2002-03 (IAF) from Mozambique; the Uganda National Household Survey (UNHS) (2005-06) and the Living Conditions Monitoring Survey IV (LCMS) from Zambia (2004). These surveys are similar in structure; they are cross-sectional in nature and support nationally representative analysis.

The policy variable of interest in these analyses is *per capita* consumption, calculated as the household's aggregate consumption divided by household size. Although receipt of a cash transfer represents an increase in income, use of the consumption variable helps to avoid problems associated with underreporting of income and measurement of household production. The household consumption aggregates employed are those calculated by the national statistics offices that manage the surveys. Consumption aggregates are adjusted for local prices, so that the purchasing power of equal consumption levels is equivalent across sample clusters. *Per capita* consumption is used to calculate the (population weighted) decile rank of individuals.

3.1 Descriptive analysis

Descriptive statistics for the data supporting the analysis are presented in Table 1. Though one cannot compare poverty lines and, hence, poverty rates between countries directly, due to differences that may exist in the consumption basket used to calculate poverty lines, these data offer some useful comparisons across country and may have some predictive value regarding the comparative results of the analysis. GDP is much higher in Uganda at USD 10.6 billion than in the other three countries. Malawi's GDP is USD 1.9 billion; Mozambique's is USD 4.1 billion and Zambia's is USD 5.4 billion. These figures are in 2007 USD and are calculated by inflating the local currency GDP figure at the time of the survey year by the local price index, and then converting to USD at the 2007 exchange rate.

Examination of the baseline poverty indicators support the notion that larger numbers of the poor will be predicted to receive transfers under universal grants in Zambia and Uganda than in the other two countries in this study, and that the lowest numbers will occur in Malawi. Zambia has the highest poverty headcount ratio ($H = 0.70$) and the highest squared poverty gap ratio ($SPG = 0.25$): not only does a larger proportion of the population live below the poverty line in Zambia, but the gap between *per capita* consumption and the poverty line is greater in Zambia for the poorest households. Malawi and Mozambique have similar H and SPG , while all poverty indicators are lowest in Uganda and Uganda also has the largest population at 30 million. Table 2 reports sub-group rates for the 6 demographic groups considered in this paper.

The patterns shown here indicate that the relationship between poverty and household demography is very different in Malawi compared to the remaining 3 countries. In Mozambique, Uganda and Zambia, poverty rates increase as larger groups of children are considered, and decrease as larger groups of elderly are considered. The best example is Zambia, where the poverty rate is 74% for children 0-5 and increases to 76% for children 0-17, while the poverty rate for the elderly aged 75+ is 73% but declines to 72% for 65+. In Malawi on the other hand, the poverty rate for younger kids is lower than for kids 0-17, while the poverty rate is highest for elderly aged 65+ compared to those aged 70+ and 75+. Table 2 suggests that the welfare impact of social grants may be very different in Malawi relative to the other 3 countries. Note also that in Uganda, the poverty rate of those aged 65+ is actually significantly lower than the overall population poverty rate (28 versus 35%).

3.2 Total costs

Table 3 reports the total cost in 2007 USD and as a share of GDP for the 6 different social grants in each of the 4 countries. The cost of a CSG is significantly larger relative to the OAP and this is naturally a function of national demographic characteristics—all countries have significantly more children than elderly. The most expansive CSG (covering children up to and including age 17) would cost the most in Malawi (3.21% of GDP), and about the same in the other 3 countries (1.4-1.7% of GDP). Assuming that national expenditure is approximately 25 percent of GDP, then multiplying these figures by 4 would give the approximate percent of the national budget that such a scheme would occupy—12.8% in Malawi and between 5.6 and 6.8% in the other 3 countries. In contrast, the most expansive OAP (encompassing those aged 65+) would cost about 0.27% of GDP in Malawi and half that amount in the other 3 countries. Of course such a scheme would only reach about 7-9% of people relative to the most expansive CSG, and in fact the cost reduction is almost exactly that proportion as well. Consequently, the main implication of Table 3 is that a universal OAP would only reach about 8% of the people that a CSG would, and would thus cost only 8% the amount that a CSG would (assuming equivalent per person transfer as we have done).

3.3 Distribution of recipients

We now turn our attention to the progressivity and potential spill-over effects of a CSG versus OAP in the 4 countries. Table 4 reports total household and individual beneficiaries of each social grant, as well as the decile distribution of recipients. There are clear differences in the type of household that would receive transfers under alternative social grant scenarios. The most inclusive CSG would reach about two-thirds of all households in these countries, and virtually every single household in the bottom 3 deciles of the national consumption distribution—the 0-17 CSG is thus very strongly progressive in its distribution of benefits. More restrictive CSG schemes (0-5, 0-10) reach fewer households altogether, and a smaller share in the bottom 3 deciles, though the difference between the 0-10 and 0-17 CSG is not very different. In contrast, the OAP appears to be much less progressive. The most inclusive (65+) OAP reaches only about 10% of all households, and only 15% of households in the bottom 3 deciles. This of course is directly related to the position in the consumption distribution of households containing elderly—these households are ‘richer’ than households with children, and in Uganda, households with a person aged 65+ have poverty rates significantly lower than the overall national poverty rate.

A comparison of columns 1 and 2 in Table 4 reveal that households with children are significantly larger than those containing elderly, so that the average grant to a recipient household under a CSG is about 2.5 for the 0-17 CSG, compared to about 1.1 for the 65+ OAP. The full implication of this is not clear. If CSG households also have more non-eligible residents, than the total number of ‘indirect’ beneficiaries will be greater compared to an OAP. However one argument put forth by advocates for social pensions is that the elderly are often responsible for raising children, especially when prime-age mortality is high due to AIDS, thus social pensions can end up benefitting children. In the last two columns of Table 4 we test this proposition, and find that about 75% of households with an elderly aged 65+ also contain at least one child under age 18 (last column of Table 4). In contrast, only about 12% of households with a child under 18 also contain an elderly person age 65+. So it does appear to be true that the majority (75%) of household eligible to receive an OAP would have a resident child who could in theory benefit from indirectly from the transfer. But it is also true that the total number of children receiving such indirect benefits is vastly smaller under an OAP than the number that

would receive benefits directly under a CSG. This is perhaps simply stating the obvious: if the purpose of the social grant is to support children (the elderly), then it should explicitly target children (the elderly).

3.4 Poverty impacts

The welfare consequence of each type of social grant is reported in Table 5. The top panel shows baseline and estimated levels of each indicator while the bottom panel reports the percentage change from the baseline. The results are not surprising given what we already know about the amount of money that would be spent under each type of grant, and the distribution of beneficiaries. A CSG would reach more households and individuals given the demographic structure of these countries, and would also reach more households in the poorer deciles since child poverty rates are higher than elderly poverty rates. Thus, the poverty impacts of a CSG are far greater than those from an OAP. A CSG would have the largest poverty impacts in Uganda and the smallest in Zambia. In Uganda for example, the 0-17 CSG would reduce H, PG and SPG by 6.8%, 13.3% and 18.2% respectively. In Zambia the comparable figures are 1.9%, 6.4% and 10.2% respectively. The impacts for Mozambique and Malawi fall between these two ranges. On the other hand, the most inclusive OAP (65+) would also have the largest poverty impact in Uganda, but now the reductions in H, PG and SPG are 0.3%, 1.0% and 2.3% respectively. Recall that the cost (and number of recipients) for the OAP is about one-twelfth (or 8%) that of the CSG; the relative welfare impact of the OAP tends to be slightly lower than that, though there is some variation across countries and specific indicators.

4. Discussion and Policy Implications

Social protection has become an increasingly important part of the social policy dialogue in sub-Saharan Africa. Economists argue that social protection can contribute directly growth, by addressing market failures such as imperfect credit markets and by reducing inequality and thus crime and violence which can affect entrepreneurship and business climate. Human rights activists argue that social protection ought to be part of the basic package of services that governments provide for citizens, and that state parties have committed to ensuring a minimum standard of living to its most marginal and vulnerable citizens through the UDHR, CRC and related covenants. Children and the elderly are oft-cited examples of vulnerable groups

that should be afforded the right to a social grant. With limited budgets, to whom should governments first progressively extend the right to social protection to? This paper provides useful information about the costs and potential benefits of a CSG and OAP using 4 ESA countries as case studies, and the results point to some very clear differences in both costs and the progressivity of benefits under these alternative schemes.

Holding the size of the grant constant, a CSG will cost significantly more than an OAP primarily due to the demographic structure of African countries—there are simply more children than elderly. But the age of individuals is strongly correlated with poverty, and children are far more likely to live in poor households than the elderly. Consequently, the most inclusive CSG, covering children aged 0-17, will reach almost all households in the poorest 3 deciles while the most inclusive (65+) OAP will only reach about 12% of households in the poorest 3 deciles. The result is that the overall poverty impact of a CSG is much greater than that of an OAP. It is often stated that the OAP will indirectly benefit children since the elderly are increasingly caring for children due to prime-age mortality caused by AIDS. Survey data from these 4 countries indicate that about 75% of OAP recipient households would contain a child under 18, who might indirectly benefit from the social pension. But the total number of these households is extremely small because of the low overall reach of the OAP, which would cover only about 10% of households. Thus, the most inclusive OAP (65+) would only reach about 7.5% of households with children, and very few of these would be the poorest children (from the bottom 3 deciles). On the other hand, the most inclusive CSG would reach about 12% of households with an elderly (65+) resident, and these households would receive on average about 2.5 grants, compared to only 1 grant in the OAP scheme. Thus an elderly person stands more of a chance of being an indirect beneficiary of a grant under a scheme that targets children, than a child has under a scheme that targets the elderly. And the CSG would reach more elderly poor, while an OAP would reach much fewer poor children. Thus the spillover or indirect benefits to the elderly of a CSG are likely to be much greater than the spillovers to children of an OAP.

References

Deaton, Angus, 1997. The Analysis of Household Surveys: A Microeconometric Approach to Development Policy. Johns Hopkins University Press for The World Bank.

EPRI, 2008, "Quantitative Analysis of the Impact of the Child Support Grant," mimeo, Economic Policy Research Institute, Cape Town, South Africa.

Kakwani, Nanak, Fabio Soares and Hyun H. Son, 2006, "Cash Transfers for School-Age Children in African Countries: Simulation of Impacts on Poverty and School Attendance," Development Policy Review Vol. 24(5): 553-569.

Schubert, Bernd (2007), "The Impact of Social Cash Transfers on Children affected by HIV and AIDS," UNICEF-ESARO, Nairobi, Kenya.

UNICEF-ESARO, 2008, Social Protection in Eastern & Southern Africa: A Framework and Strategy for UNICEF. UNICEF Regional Office, Nairobi, Kenya.

UNICEF and UNAIDS (2004) The Framework for the protection, care and support of orphans and vulnerable children living in a world with HIV and AIDS, New York.

UNICEF/UNAIDS/USG (2006) Africa's Orphaned and Vulnerable Generation: children affected by AIDS, New York.

Table 1: Summary statistics by country

	Malawi	Mozambique	Zambia	Uganda
Poverty analysis				
Population (million)	12.2	18.3	10.8	30
GDP (2007 USD billion)	1.90	4.09	5.44	10.6
Poverty line, monthly (USD)	9.71	10.07	26.13	13.8
<i>Per capita</i> consumption, monthly (USD)	15.04	14.94	32.88	23.57
Baseline poverty indicators				
Poverty headcount ratio	0.524	0.541	0.701	0.351
Poverty gap ratio	0.178	0.205	0.376	0.105
Squared poverty gap ratio	0.080	0.103	0.245	0.044
Household size (mean)	4.5	4.8	5.2	5.3
Households in sample	11,280	8,700	19,236	7,421
Survey and year	IHS 2004	IAF 2002-03	LCMS 2004	UNHS 2005-06
Price inflator 2007:survey year				
USD Exchange rate rate 2007				

Notes: Gross domestic product values obtained from the IMF (2007). Summary statistics for the poverty analysis are computed using population weights derived from household weights and household size. Monetary data are given in USD 2007.

Table 2: Poverty headcounts by target group

	Malawi	Mozambique	Zambia	Uganda
Category				
All	0.524	0.541	0.701	0.351
children 0-5	0.582	0.582	0.741	0.380
children 0-10	0.584	0.595	0.751	0.395
children 0-17	0.558	0.597	0.758	0.394
adults 75+	0.493	0.499	0.733	0.324
adults 70+	0.489	0.500	0.719	0.312
adults 65+	0.506	0.453	0.717	0.284

Table 3: Budget requirements under alternative targeting strategies.

	Individuals reached	Mean increase in per capita consumption among recipients (%)	Total Cost (2007 USD)	Total Cost as Percent of GDP
Malawi				
children 0-5	2,092,291	4.02	39,951,140	1.59
children 0-10	3,428,108	5.49	65,457,828	2.61
children 0-17	4,214,405	6.20	80,471,736	3.21
adults 75+	143,202	3.30	2,734,371	0.11
adults 70+	247,597	3.39	4,727,737	0.19
adults 65+	360,401	3.47	6,881,667	0.27
Mozambique				
children 0-5	3,220,018	4.63	70,850,776	0.89
children 0-10	5,035,773	6.07	110,803,224	1.40
children 0-17	6,145,387	6.88	135,218,288	1.70
adults 75+	114,767	3.14	2,525,246	0.03
adults 70+	260,636	3.48	5,734,834	0.07
adults 65+	437,127	3.76	9,618,206	0.12
Zambia				
children 0-5	425,822	5.98	21,003,414	0.20
children 0-10	1,915,512	10.43	94,481,488	0.89
children 0-17	3,011,088	13.58	148,520,112	1.40
adults 75+	82,569	7.83	4,072,655	0.04
adults 70+	144,871	8.10	7,145,653	0.07
adults 65+	234,533	8.72	11,568,217	0.11
Uganda				
children 0-5	5,021,082	3.14	99,903,720	0.94
children 0-10	7,479,942	4.04	148,827,280	1.41
children 0-17	8,989,910	4.54	178,870,880	1.69
adults 75+	274,513	2.05	5,461,953	0.05
adults 70+	467,495	2.15	9,301,685	0.09
adults 65+	709,487	2.26	14,116,546	0.13

Notes: Results presented are from analysis of the full household sample, using population weights.

Table 4: Numbers of beneficiaries under alternative targeting strategies by country

	Households reached	Individuals reached	Recipient households as share of all households (%)	Share of recipient households in bottom 3 deciles (%)	Recipient household has resident age 65+ (%)	Recipient household has resident age <18 (%)
Malawi						
children 0-5	1,308,372	2,092,291	48.57	75.84	7.91	-
children 0-10	1,617,553	3,428,108	60.05	92.12	10.61	-
children 0-17	1,783,434	4,214,405	66.21	97.92	12.68	-
adults 75+	129,175	143,202	4.80	6.76	-	70.51
adults 70+	213,433	247,597	7.92	10.79	-	73.30
adults 65+	298,483	360,401	11.08	15.31	-	75.73
Mozambique						
children 0-5	1,924,141	3,220,018	50.52	78.49	8.51	-
children 0-10	2,333,169	5,035,773	61.26	89.05	9.99	-
children 0-17	2,545,344	6,145,387	66.83	94.66	10.83	-
adults 75+	108,517	114,767	2.85	3.79	-	66.53
adults 70+	238,100	260,636	6.25	10.34	-	68.75
adults 65+	374,051	437,127	9.82	15.86	-	73.71
Zambia						
children 0-5	380,551	425,822	18.28	28.13	8.43	-
children 0-10	1,080,612	1,915,512	51.90	76.22	10.23	-
children 0-17	1,320,930	3,011,088	63.44	90.44	11.82	-
adults 75+	77,484	82,569	3.72	6.64	-	74.54
adults 70+	129,820	144,871	6.24	10.90	-	75.82
adults 65+	198,812	234,533	9.55	16.60	-	78.53
Uganda						
children 0-5	2,729,051	5,021,082	52.19	74.87	9.26	-
children 0-10	3,231,252	7,479,942	61.79	87.69	11.39	-
children 0-17	3,528,482	8,989,910	67.48	93.93	13.12	-
adults 75+	257,398	274,513	4.92	6.05	-	72.83
adults 70+	425,091	467,495	8.13	10.65	-	73.74
adults 65+	620,971	709,487	11.88	15.69	-	74.53

Table 5: Poverty rates and percentage changes due to alternative cash grant schemes

	T											
	Malawi			Mozambique			Zambia			Uganda		
	H	PG	SPG	H	PG	SPG	H	PG	SPG	H	PG	SPG
Targeting Strategy												
baseline	0.524	0.178	0.080	0.541	0.205	0.103	0.701	0.376	0.245	0.351	0.105	0.044
children 0-5	0.512	0.167	0.072	0.530	0.193	0.094	0.699	0.373	0.242	0.337	0.096	0.039
children 0-10	0.502	0.159	0.068	0.520	0.186	0.090	0.693	0.360	0.229	0.329	0.093	0.037
children 0-17	0.497	0.156	0.065	0.516	0.183	0.087	0.688	0.352	0.220	0.327	0.091	0.036
adults 75+	0.523	0.177	0.079	0.540	0.205	0.103	0.700	0.376	0.245	0.351	0.104	0.043
adults 70+	0.522	0.177	0.079	0.540	0.204	0.103	0.700	0.375	0.244	0.350	0.104	0.043
adults 65+	0.521	0.176	0.079	0.539	0.204	0.102	0.700	0.374	0.243	0.350	0.104	0.043
Percentage decrease from baseline												
children 0-5	2.29	6.18	10.00	2.03	5.85	8.74	0.29	0.80	1.22	3.989	8.571	11.364
children 0-10	4.20	10.67	15.00	3.88	9.27	12.62	1.14	4.26	6.53	6.268	11.429	15.909
children 0-17	5.15	12.36	18.75	4.62	10.73	15.53	1.85	6.38	10.20	6.838	13.333	18.182
adults 75+	0.19	0.56	1.25	0.18	0.00	0.00	0.14	0.00	0.00	0.000	0.952	2.273
adults 70+	0.38	0.56	1.25	0.18	0.49	0.00	0.14	0.27	0.41	0.285	0.952	2.273
adults 65+	0.57	1.12	1.25	0.37	0.49	0.97	0.14	0.53	0.82	0.285	0.952	2.273

Notes: Values for H, PG & SPG are obtained from micro-simulations as described in the text. Percentage decreases in the lower panel are computed using values in the upper panel of the table.