

Targeting effectiveness of Social Cash Transfer Programs in Three Africa Countries

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Abstract

Social transfers are increasingly being seen as a key tool in East and Southern Africa for combating the triple threat of chronic poverty, hunger and HIV/AIDS. In the advent of the global financial, food and fuel crises there are increasing calls for the scale up of such programs to protect the poor and promote the human capital of children. As programs expand, a number of design and implementation issues have begun to dominate the policy debate, and one topic in particular is targeting, which has emerged as a contentious issue in program design in the region. A variety of approaches are used in the region, ranging from universal old age pensions, to means-tested child support grants, to a variety of community based poverty and OVC targeted programs. To help better understand some of the different targeting approaches in the region and their effectiveness, this paper examines three cash transfer programs in Kenya, Malawi and Mozambique. All three countries employ community based targeting mechanisms; each, however, targets different kinds of households and employs different methodologies. This study combines descriptive analysis of the targeting process with quantitative analysis comparing the characteristics of beneficiary households taken from program baseline evaluation surveys with characteristics of poor households based on national household surveys. The study uses monetary, asset-based, and multidimensional measures to compare the effectiveness of the programs' targeting when using economic poverty measures vs. multidimensional measures. It then assesses these measures of effectiveness in light of the program objectives and desired beneficiary populations, and explores policy implications for the different targeting approaches.

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1. Introduction

With the rapid expansion of social cash transfers around sub Saharan Africa, design and implementation issues have become a key part of the policy dialogue between development partners and governments. This paper addresses one particular aspect of program design and implementation, the selection and targeting of beneficiaries. While some universal programs exist, notably in Southern Africa and focused on the elderly, almost all other programs employ some form of poverty targeting coupled with demographic eligibility criteria. A key distinction between the targeted cash transfer programs (CTs) programs in Latin American and those in Africa is that the latter incorporate a strong element of community based targeting (CBT) into the overall selection of beneficiaries while the former set of programs are largely driven by proxy means test (PMT) targeting. But the evidence on CBT approaches to beneficiary selection is somewhat mixed, with concerns about elite capture and corruption tending to outweigh the perceived positive benefits of local knowledge, participation, ownership and empowerment.

This paper provides unique evidence on the targeting performance of several SCT programs in Africa, where recently released evaluation data has made it possible to assess targeting in a quantitative manner. The programs we study are the Malawi Social Cash Transfer Scheme (SCT), the Kenya Cash Transfer for Orphans and Vulnerable Children (CT-OVC), and Mozambique's *Programa Subsídio de Alimentos* (PSA) Program. All three are targeted cash transfer programs that incorporate demographic eligibility criteria as well as an important dimension of CBT into their beneficiary selection process. We begin with a description of the targeting process in each program to understand how CBT is approached and its importance in the final selection of beneficiaries. We then turn to a quantitative assessment of targeting performance, using evaluation data from two programs, SCT and CT-OVC. We compare the profile of beneficiaries with those of the population at large using nationally representative household surveys, and then develop a comparable, multidimensional measure of well-being and use it to assess targeting performance of each program. The paper extends the literature on targeting of poverty programs in several new directions. First, the recent global assessment of targeting by Coady, Grosh and Hoddinott (2004) covers only 13 programs from sub Saharan Africa (out of 122 programs that were evaluated in the study) and very few CBT programs so we provide new evidence both from this region and on programs that employ CBT. Second, we develop a novel method of comparing the welfare of households from evaluation data and nationally representative data when household consumption is either not measured or not measured in the same way. We believe this approach will prove fruitful in other countries where assessments of targeting have been hampered by this data limitation.

2. Brief Literature Review

In this section we provide a brief summary of the global review of targeting provided recently by Coady, Grosh, and Hoddinott (2004), followed by a lengthier review of the published literature on assessments of CBT, since this particular approach is widely used in targeted CTs in sub Saharan Africa (SSA).

Coady et al. conduct a metastudy using a compiled database of 122 antipoverty interventions in 48 countries to examine the effectiveness of nine targeting mechanisms commonly implemented in social programs. The nine mechanisms include means testing, PMT, CBT, three types of categorical methods (geographic, age – elderly, age – young), and self-selection (work, community bidding, consumption). To compare targeting performance across heterogeneous programs, the authors construct a uniform measure using the proportion of benefits received within each income decile, by dividing the program's actual performance against a neutral targeting outcome. Neutral meaning, what the outcome would have been had a targeting mechanism not been implemented; for instance, if benefits had been randomly allocated across all income deciles or universally distributed. They find large variation in targeting performance, with the ten least effective mechanisms ranging from 0.28 to 0.78 and a median score of 0.60; the ten most effective mechanisms ranged from 2.02 to 4.0, with a median score of 2.15. The median across all methods is 1.25, indicating that the median program transfers 25% more to poor individuals than without targeting. Among the cash transfer programs included in their sample, the median (and mean) score is 1.80. Their key finding, however, is that across all nine mechanisms, the median targeting performance is roughly constant, between 1.0 – 1.89. This illustrates that no one stand alone method works better, though the authors note that combination methods seem to perform better than stand-alone approaches.

Community-based development (CBD) is a design of social programming which promotes local shareholder engagement by including community members in decision-making processes. While CBD and decentralized policies have been used historically (Conning and Kevane 2002), an influx of recent social programs have used this method to determine such decisions as funding allocations within the community and eligibility for program participation. One aspect of CBD is community-based targeting (CBT), whereby community members determine program eligibility by identifying poor households that would qualify for program assistance. The central benefit resides in the idea that community members are familiar with the community's characteristics and possess insider knowledge that alternative forms of targeting cannot capture.

The literature presents mixed results on CBT's performance of targeting to the poor while excluding leakages to non-poor and rich. Watkins (2008) examines three districts in Zambia (Chipata, Kalomo, and Kazungula), finding varying targeting success. Chipata was able to successfully identify the poorest strata while excluding the richest households; however, there was considerable leakage of program benefits to intermediate income deciles (50%). In Kalomo, the poorest were successfully identified, but the program exhibited evidence of elite capture. In the third district, Kazungula, CBT fared the worst – poor program recipients were not significantly different than those who were not poor. Alatas et al. (2009) study a cash transfer program in Indonesia and draw similar findings. They compare three types of identification methods – proxy means testing (PMT), CBT, and a hybrid of PMT and CBT – and conclude that CBT and the hybrid method fared poorly against a measure of per capita expenditure. Galasso and Ravallion (2000) examine Bangladesh's Food for Education program and discover that, in participating villages, 46% of the poor received the program as opposed to 32% of the non-poor, a mildly pro-poor percentage.

A plausible explanation for these results is that within larger communities, members may not be able to parse subtle differences in wealth. Furthermore, differing definitions of poverty between the formal measuring instrument and the community may result in different weights assigned to poverty. The community may be better able to determine unmeasurable determinants of poverty, such as instances of bad luck, as opposed to effort levels (Alatas 2009, Conning and Kevane 2002).

CBT's performance as an identification tool is a function of the level of inequality, spatial density, and geographic setting of the community. Currently, no consensus exists on how inequality influences targeting effectiveness. Galasso and Ravallion find that villages with higher land inequality target less precisely than villages with less inequality. They attribute greater inequality to declines in distribution of reservation utilities and argue that CBT perpetuates inequality. Similarly, Watkins finds that in Chipata, CBT was "relatively successful in identifying the extreme cases...but [not] successful in distinguishing between the shades of poverty in between."² Watkins reasons that the compactness of a community influences how much information is known about each community member's poverty levels. Therefore, a dense rural community may target better than an urban area of diverse wealth.

In a study of an Indonesian anti-poverty program, Yamauchi (2008) finds different results – wealthier, yet more stratified villages provide more resources to the poor. A decrease in per capita expenditure for the poor households was associated with a 0.3-0.4 % decrease in benefits accruing to the poor. Furthermore, young and educated leaders of the communities were associated with better targeting outcomes in the first year because of social and political incentives, but these results declined as the program progressed, especially for targeting at the poorest deciles.

Elite capture is a primary concern in decentralization theory that has been discussed frequently in the literature with its relation to inequality. Elite capture may occur where a few leaders of the community delegate resources to community members on a basis other than actual need or when more politically active communities crowd out less vocal communities of need. In their study of a project in the Philippines, Labonne and Chase (2008) and Bardhan and Mookherjee (2000) find that elite capture may exist between income deciles of the same community. They find that households of medium income are adequately represented in the process, as opposed to the richest or most educated, but socially excluded and marginalized communities find themselves at a disadvantage, due to information asymmetries. The literature also indicates that elite capture may not have as large an effect as theorized (Alatas 2009; Yamauchi 2008) with careful program design. Features such as strong supervision and increased civic participation (Watkins 2008), or sanctions and institutionalized structures of competition between rival local leaders (Platteau and Gaspert 2003) may minimize threat of elite capture.

CBT's cost-effectiveness has not been analyzed as deeply as other criteria, though there are many theories that it is a less expensive identification method to implement, due to

² Pp. 26.

member proximity and intimate knowledge of community composition (Watkins 2008). Additionally, hiring locals as opposed to foreign workers or non-community members may reduce costs (Conning and Kevane 2002). One important note is that some unaccounted costs are assumed by community members because they are not fully compensated for process-related activities which are necessary to create or maintain selection committees. Such activities may include mobilization of the community, election of members within the selection committees, announcements and scrutiny of decisions, recourse and complaints (Watkins 2008). Watkins posits that for the Zambian program, “the daily wage rate may exaggerate the full opportunity cost of rural labour.”

However, CBT provides other benefits such as increasing local participation, gaining shareholder buy-in, and empowering marginalized community members (Conning and Kevane 2002). Benefits arise from a transparent process, one that is perceived by the community as equitable. Greater participation may improve targeting outcomes as more community members are able to identify community membership and wealth levels. Studies examining equity find that community members were more likely to view CBT outcomes as being fair (Watkins 2008; Alatas et al. 2009) because of collective decision-making.

In summary, CBT requires further empirical analysis in order to measure their full impact on targeting effectiveness. This may be challenging, given that CBT depends on the community’s discretionary definitions of poverty, even when advised by program eligibility guidelines. Despite literature indicating poor performance compared to alternative methods and high vulnerability to elite capture, community buy-in cannot be understated. The benefits arising from community engagement and perceived equitable processes bring positive benefits which may affect current and future programs.

3. Description of Targeting in three SCT Programs in SSA

The table below provides a summary of the program characteristics in the three countries.

	Kenya	Malawi	Mozambique
Program	Cash Transfer Program for Orphans and Vulnerable Children (CT-OVC)	Social Cash Transfer Program	Programa Subsidio de Alimentos (PSA) or Food Subsidy Programme
Source of Funding	Global Fund for HIV, TB and Malaria	Global Fund to Fight AIDS, Tuberculosis and Malaria; Government; UNICEF	Mozambique Government
Executing Agencies	Ministry of Gender	Ministry of Gender, Children and Community Development, District Assemblies	National Institute of Social Action (INAS) of the Ministry for Women and Social Action (MMAS).

Objective	Strengthen the capacity of households and communities to care for OVCs and invest in their human capital development	To reduce poverty, hunger and starvation and increase school enrolment and attendance in ultra poor households w/o labour	To provide direct assistance, create minimum conditions for survival and provide psycho-social support to individuals permanently unable to work and in absolute poverty.
Target Group	Families with orphans and vulnerable children	Ultra poor and labor constrained households as identified through CBT	Elderly, disabled and chronically-sick that are permanently unable to work and who live alone or are heads of destitute households
Geographic Distribution	Approximately 47 districts	7 Districts - 2006 (Mchinji), 2007 (Likoma, Machinga, Salima), 2008 (Chilipa, Mangochi, Phalombe)	All district capitals and some administrative posts, with expansion planned to more rural areas.
Number of people reached	Currently 75,000. Eventual target: 100,000 households (300,000 OVC, estimated 3 OVC per household)	Currently 106,500 individuals in 28,000 households. Target: 1.3 million people in 300,000 households nationwide (approx. 10% of population)	143,455 households (end 2008)
Value of Transfer	\$21 USD; Ksh 1500	Varies based on household size and number of school going children in household. Average USD 14 (MK 2,000)	Varies based on household size, value between 100 and 300Mtn
Targeting Mechanism	Districts selected based on HIV prevalence, targeting process led by members of community called the Location OVC Committees (LOC) based on eligibility criteria. LOCs visit all households and all members decide who qualifies, list is sent to Nairobi and enumerators return to households to further prioritize households based on a ranking system	Community members form a Community Social Protection Committee, who visits each household to verify eligibility and ranks each household according to need. Results are published publicly. District verifies that all applicants qualify.	The candidate applies to a local intermediary, or 'permanente' (who is chosen by the community and appointed by INAS). The permanente completes an application form for the candidate and sends the application to the INAS for approval. The INAS visits the candidate to check socio-economic information.
Transfer Mechanism		Delivered manually at a central point in the Village Group (i.e. a school)	Delivered through the Permanente (local intermediary)

3.1 Targeting in Kenya's OVC Cash Transfer Programme

Kenya's Cash Transfer for Orphans and Vulnerable Children (CT-OVC) Programme was designed to provide cash assistance to households caring for OVC while encouraging OVC human capital development. The initial pilot enrolled 500 households in Garissa, Kwale and Nairobi (approximately 3,000 OVC) in 2004. The program continued to Phase 2 after

positive impacts were observed in education, health, and nutrition. This second phase covered approximately 7,500 OVC in thirteen districts. Currently, the program reaches 75,000 households across Kenya, with the ultimate goal of providing coverage to 100,000 households or 300,000 OVC.

The CT-OVC incorporates two features of cash transfer programs found in demonstrations across Sub-Saharan Africa: it targets the poor and incorporates community-based identification mechanisms to select program recipients. The targeting mechanism used by the program is based on geographic location, community, and individual selection. Districts were selected based on the prevalence of HIV and other technical criteria, such as whether the district would receive donor support. The community-based targeting process is led by members of the community called the Location OVC Committees (LOCs) who are in charge of identifying households within selected geographic areas based on eligibility criteria.

Household eligibility is determined on two criteria:

- 1) The residence of at least one OVC in the household. An OVC is defined as a household resident between 0 to 17 years old with at least one deceased parent, or who is chronically ill, or whose main caregiver is chronically ill;
- 2) Poverty characteristics, if the household exhibits at least eight of seventeen program-identified indicators.

Characteristics of household members include any of the following: none of the adults in the household have attained a standard 8 level of education; if the caregiver of the household is not currently working or s/he is working and not a farmer or laborer; or, if the caregiver possesses less than two acres of land.

House infrastructure indicators include any of the following: if the walls made of mud/cow dung or grass, sticks, or makuti; if the floors or roof are made of mud or cow dung; or, if the toilet is a pan, bucket, or if the household lacks a toilet.

Household consumptions indicators include any of the following: if drinking water is sourced from the river, lake, pond; if the household uses firewood for lighting fuel; or, if firewood or residue, animal waste, or grass is used as cooking fuel;

Household asset indicators include any of the following: if the household lacks any of the following: property in the village or elsewhere; two or less zebu cattle; no hybrid cattle; five or less goats; five or less sheep; no pigs; or no camels.

The LOCs are instructed to visit all households that appear impoverished and have children. The LOCs then complete a form (Form 1—see Appendix) that lists the basic eligibility conditions to determine whether the household meets the eligibility criteria. Once the fieldwork is completed, all members of the LOC decide which households qualify or not by discussing the eligibility and needs criteria collected in the targeting form. This preliminary eligibility list is then sent to Nairobi for input into the program's Management and Information System (MIS). In stage two of the targeting process, enumerators return

to those household identified by the LOCs as eligible and collect more detailed information on household demographic composition, caregiver characteristics, and the proxy variables listed above.³

Because more households are identified by the LOC than the budget can accommodate, the central office (Nairobi) further prioritizes households based upon risk factors. An additional ranking system is employed to identify families with greater vulnerability. The ranking system first prioritizes child-headed households (under 18 years of age) and, among them, households with more orphans or vulnerable children, followed by the eldest caregivers and, within them, households with more orphans or vulnerable children. All the eligible households are listed and ranked for each program location and then validated by a community assembly. At this time, program officers explain the rules of the targeting system and announce each name out loud in the established order according to priority criteria. Households are then invited to apply for the program.

3.2 Targeting in Malawi's Social Cash Transfer Programme

The Government of Malawi, in collaboration with UNICEF and the Global Fund to Fight AIDS, Tuberculosis and Malaria, has undertaken a social protection scheme to provide cash assistance to the greatest at-risk households in the country. In 2006, the Malawi Social Cash Transfer program was piloted in the Mchinji District, targeting 3,000 households. Currently, seven districts are implementing the program, with three waves implemented in 2007 (Likoma, Machinga, and Salima Districts) and three more in 2008 (Chilipa, Mangochi, and Phalombe). The program targets ultra-poor and labour constrained households.

Three levels (national, district, and community) are responsible for the Malawi Social Cash Transfer program. The national government is responsible for establishing program criteria and guidelines and identifying eligible districts. On the district-level, the Social Cash Transfer Scheme Secretariat possesses operational and oversight authority over the program. This group is comprised of the District Social Welfare Officer, Social Welfare Assistants, and other Assembly and NGO Officers who are trainers and facilitators for the program. The Secretariat selects villages of between 27,000 and 33,000 households to implement the program.

Applicant selection is decentralized – the community plays a critical role in identifying all qualifying households and submitting applications to the district level. Community members comprise targeting arm of the program, the Community Social Protection Committee (CSPC). Committee members are brought together in an initial meeting where they are apprised of the program and its purpose. The Committee is formed by separating the community into three groups based on geographic zone. From each zone, 2 men and 2 women are elected into the CSPC (for a total of 12 members, 6 female and 6 male.) CSPC members are uncompensated, must possess the enthusiasm to implement the program, the ability to read, write and speak English, have attained at least a Standard 8 education level,

³ The CT-OVC is in the process of moving to a more complete PMT by assigning (region specific) weights to the poverty related characteristics listed above and only considering households who fall below a threshold.

and must undergo training. In order to maintain impartiality and protect against elite capture, the program dictates that village heads may not sit on the CSPC.

The committee meets a second time in order to identify all eligible households through two criteria as defined by the program:

1. *Ultra poor*, falling in the lowest expenditure quintile. Indicators include consuming one meal per day, at-risk of starvation, begging for livelihood, inability to purchase non-food items such as soap, clothing, school supplies, and lacking in assets;
2. *Labor constraints* where there are no household members between the age of 19 and 64 who are able to generate an income, or where the only able-bodied independent must care for more than three dependents in the household.

The dependency ratio is a proxy measure for the labor constraint; it is calculated as a ratio of dependents to able-bodied income earners. Any household with a ratio of greater than 3 qualifies for application into the program. If the denominator is 0 (meaning there are no able-bodied income earners in the household), the dependency ratio is set equal to the numerator (number of dependents in the household).

The committee then visits each household to verify eligibility and ranks each household according to need. The ranking criteria include considerations such as the age of head of household; number of orphans and other children in the household; dependency ratio; and other indicators of the social and economic status of the household such as problems the household encounters, ways the household coped before, support that the household receives; and assets that the household owns. Form 1 (shown in the Appendix) is completed by the CSPC for each eligible household.

The committee then verifies the aggregated list of eligible households. These results are presented publicly to the community to ensure that eligible households were not omitted.

The district then verifies that all applicants qualify according to program guidelines and approves 10% of the neediest households in the village. If there are any discrepancies between community selection and national guidelines, the district is expected to apprise the committee of changes to the beneficiary list. The amount of cash assistance beneficiaries receive is weighted according to household size and whether the household has children enrolled in primary or secondary school.

Before the funds are disbursed to beneficiaries, a member of the Secretariat meets with the community and explains the purpose of the program and how payments are calculated. Guidelines indicate that program recipients are to receive their first transfer two months after CSPC members receive their training.

3.3 Targeting in Mozambique's Food Subsidy Programme

Mozambique's *Programa Subsidio de Alimentos* (PSA) or Food Subsidy Program was created in 1990 with an initial aim to provide 'emergency'-type support to destitute urban households, particularly to enable them to achieve an adequate diet (Taimo and

Waterhouse 2007). This program was instated to transition from state-subsidized rations for basic commodities that were available during the years of conflict. The program provided monthly payments roughly equivalent to one third of the minimum wage.

Since its creation in 1993, the program has evolved considerably, in terms of structure of the program and expansion, both in urban areas and increasingly extending into rural areas. The current institutional structure derives from 1997, when the National Institute of Social Action (INAS) was created, a semi-autonomous agency of the Ministry for Women and Social Action (MMAS). The program aims to provide direct assistance to individuals permanently unable to work; create minimum conditions for survival and of access to satisfy the basic needs of target groups in absolute poverty and provide psycho-social support to population groups permanently unable to work and living in absolute poverty (UNICEF and Save the Children 2009). In 2004, the INAS produced a “PSA Orientations and Procedures Manual” to standardize eligibility criteria and administrative procedure guidelines. Around this time, the program began expanding into rural areas, with shifting programmatic focus towards the elderly (Taimo and Waterhouse 2007).

The program is entirely funded by government resources and has the largest coverage of all the INAS social protection schemes. In 2008, the program reached 143,455 households, with a total of 287,454 beneficiaries (International Poverty Centre for Inclusive Growth 2010; Government of Mozambique 2010). The Government of Mozambique estimates that in 2009, 172,000 households benefited from the scheme. The targeted beneficiaries included the following:

- 1) The elderly (aged 55 and over for women or 60 and over for men) who are recognized as being permanently unable to work and who live alone or are heads of destitute households. This group accounts for 93% of direct beneficiaries in 2008.
- 2) The disabled who are recognized as permanently unable to work and who live alone or are heads of destitute households; 6 percent of direct beneficiaries in 2008.
- 3) The chronically ill who suffer from a chronic disease recognized by the medical services (with the exception of HIV/AIDS and tuberculosis), who are unable to work and live alone, or are heads of destitute households. This group comprises 1 percent of direct beneficiaries in 2008.
- 4) Malnourished pregnant women.

In addition, monthly transfers are provided to indirect beneficiaries, based on the number of dependents in the household, up to a maximum of four dependents. UNICEF and Save the Children (2009) estimate the number of indirect beneficiaries (i.e. non-targeted individuals who live in the same household as targeted individuals) to be around 200,000. According to a recent study carried out by INAS, more than half of the direct beneficiaries (60 per cent) are caring for at least one orphaned child, or an estimated 73,000 vulnerable children (UNDP, UNFPA, UNICEF and WFP 2009).

Taimo and Waterhouse (2007) indicate that until 2008, the amount of the transfer was 70Mtn for a direct beneficiary, up to a maximum of 140Mtn depending on the number of dependents. This was equivalent to less than 10 percent of the minimum wage. In 2008, a new scale of the Food Subsidy Program came into effect, with a monthly transfer value between 100 and 300Mtn. In spite of the increase in transfer scale, the value of the basic transfer is still less than ten per cent of the current minimum wage (Government of Mozambique 2010).

The selection of beneficiaries is based on the following criteria: age, as verified by the national identity card, residence, as verified by a declaration signed by the local administrative structure, income of less than 70Mtn if there is a household member who works or receives a pension, and clinical documentation for the disabled, chronically ill or malnourished pregnant women (Taimo and Waterhouse 2007). The programme uses community-based targeting through a 'Permanente', who is the main intermediary between the beneficiary and the INAS. The Permanente is elected by the community, must possess sufficient time and be competent, serious and honest (Veras, et al. 2009). Based on 2006 figures, they receive a monthly stipend of 300Mtn each – a low sum, given the key role the Permanentes play (Veras, et al. 2009).

In order to apply for the program, the applicant must first meet with the Permanente, who then coordinates with the Secretary of the Bairro to complete a questionnaire form on behalf of the applicant. The questionnaire requests information on the candidate,; such as, composition of the household, characteristics and conditions of the residence, occupation and possible subsistence activities of household members. Along with the questionnaire, the Permanente collects a photocopy of the identity card, certificate of disability or illness signed by a medical unit or a pre-natal card when applicable (Veras, et al.). The forms are then sent to the Delegation or sub-delegation of INAS who are required to process the forms within 15 days. The INAS organizes an individual case file and creates a reference number. The INAS is then required to make a home visit to the beneficiary to check and analyze the socio-economic information such as age, residence, income, social and clinical condition (Veras, et al. 2009). INAS provides written approval, which is communicated to the Permanente. The Permanente informs the candidate of programmatic procedures and the amount, date and place of payment, if accepted. If the applicant does not qualify, the Permanente is required to provide reasons within 5 days.

4. Analysis of Targeting Performance

We now turn to an assessment of targeting performance, in the cases of Malawi and Kenya this is based on evaluation data and national household survey data. Our approach is to compare characteristics of program participants with the population to see how demographic characteristics of participants differ from the overall population as well as the ultra-poor in general (since in all cases programs focus on providing benefits to the poorest households). We also try and assess targeting performance in the spirit of Coady et al. by determining the share of beneficiaries in the poorest quintiles, though this is challenging because the available evaluation data typically does not measure monetary well-being in the same way as national household surveys upon which poverty lines and estimates are

based. Finally, since programs combine demographic eligibility criteria with relative poverty status, we provide some evidence on the relative poverty of the eligible population to help place targeting performance in perspective.

It is not currently possible to evaluate the targeting performance of the Mozambique program in this way. Therefore, we undertake a review of the literature and previous evaluations. A baseline survey conducted by Metier in 2008 provides detailed data, including a focus on children's issues, for 1000 beneficiaries. This can be compared with the results of the Multiple Indicator Cluster Survey, due to be released in the next few months.

4.1 Targeting Performance in the Malawi SCT Scheme

Our assessment of the Malawi SCT scheme uses data from two sources. National data is taken from the Integrated Household Survey (IHS) 2004/05, a nationally representative multi-topic survey conducted by the National Statistical Agency covering 11,280 households, 88 percent of whom reside in rural areas. For this analysis we only use the rural sample (9,840 households) because the SCT scheme only operates in rural areas and the evaluation data is from a rural population. The evaluation data comes from the baseline survey of 817 households conducted in 2007 by Boston University (BU) as part of the impact evaluation of the scheme (Miller, et al. 2009). Half of these households were later randomly assigned to treatment while the other half had their entry delayed for 18 months. All households were eligible for the program and so we use the full sample of households at baseline for the analysis.

We begin by identifying variables that are identical across both survey instruments and comparing them to obtain an idea of how program participants differ from the nation. As mentioned above, a key challenge for the comparison of monetary welfare is that the BU instrument does not capture own production and omits several expenditure modules that are contained in the IHS. We have compared the two instruments and constructed a comparable expenditure aggregate from IHS which excludes home production and only includes the items and modules also included in BU—this 'adjusted' and 'comparable' consumption aggregate from IHS inflated to 2007 prices, is what we report in the tables below. However, as will be seen the two aggregates (IHS, BU) still diverge significantly so we must be cautious about making inferences based on consumption—we therefore do not aggressively pursue comparisons based on aggregate consumption expenditure across the two surveys.

Table 1 reports means of characteristics that can be constructed from both data sets. For IHS we report both the all rural averages as well as those for the ultra-poor group, which make up about 18% of the rural sample; all measures in this and other tables are calculated at the household level. The expenditure means are significantly different across survey instruments, with the BU mean about 66 percent of that of the ultra-poor sample and the food expenditure mean about 72 percent of that of the ultra poor. The ultra-poverty line is MK 10,209 per capita in 2004/05 or MK12,336 in 2007 prices; based on this, 97 percent of SCT participants are below the ultra-poverty line, a truly remarkable targeting result.

However the aggregate expenditure measure from BU omits home production, which is especially important for the poorest households, and is thus likely to be a significant underestimate of the true welfare of participant households, and thus an over-estimate of the proportion below the ultra-poverty line.

Beyond monetary well-being, Table 1 also provides a comparison of other welfare measures as well as demographic characteristics of participant households. For livestock and tools ownership, which are measured consistently across instruments, we observe that SCT households are significantly less likely to own any of the items listed in Table 1, both relative to all rural and ultra poor households. For example, 22 and 30 percent of SCT households own a sickle or axe respectively compared to 58 and 62 percent among all ultra-poor households in rural Malawi. This is consistent with the expenditure results in that they suggest that SCT households are indeed significantly poorer than even the ultra-poor in the country, and indicates highly accurate targeting performance of the program.

Demographic characteristics of SCT households, shown at the bottom of Table 1, indicate a profile that is very different from the typical ultra-poor household in rural Malawi. SCT families have heads who are much older (62 versus 45 years old), and live in households that are smaller (4.07 versus 6.09 people) and that have fewer children of all ages including fewer orphans. Thus SCT household have on average 0.37 and 1.68 children ages 0-5 and 6-18 respectively, compared to 1.37 and 2.47 among ultra-poor households. SCT households have over 3 times more elderly members (0.68 versus 0.19) and significantly higher dependency ratios (3.14 versus 2.79), which is to be expected since high dependency (over 3) is an eligibility criterion for the SCT.⁴ Finally, heads in SCT households have much lower education levels than ultra-poor household heads, which again is consistent with SCT households coming from the poorest deciles of the welfare distribution.

The results from Table 1 seem to indicate that the implementation of targeting in the program is highly effective, with households coming from the poorest deciles of the welfare distribution (we explore this in more detail below). However, the results also raise an interesting question about the overall eligibility criteria of SCT households, and whether the concept of high dependency plus labor constrained indeed represents the most vulnerable households in Malawi—the question we address next.

Table 2 reports poverty and ultra-poverty rates for households in IHS who are labor constrained (no member age 19-64 able to work), high dependency (over 3) and both (that is, labor constrained and high dependency). Overall (household level) poverty and ultra-poverty in rural Malawi is 46.8 and 18.2 percent respectively (column 1 of Table 2). Labor constrained households have poverty rates (37.33) that are lower than the rural average but high dependency households have significantly higher poverty rates (66.75) than the rural average; the higher poverty of these latter households leads to the results in the last

⁴ Note the definition of dependency used here, which is the number of members of age 0-18, age 65 or older and 19-64 who are not fit to work, divided by the number of members 19-64 who are fit to work.

column-- that SCT eligible households (who are both labor constrained and high dependency) have higher poverty rates relative to all households but lower poverty rates relative to high dependency households. The bottom panel of Table 2 explores this further by looking at the distribution of households among the poor. Among the poor for example, only 10.6% are labor constrained, 22.9 percent are high dependency and SCT eligible households comprise a mere 6.03 percent of the poor. Among the ultra poor, SCT eligible comprise 7.65 percent, again driven by high dependency households. The last row of Table 2 illustrates the fact that labor constrained households are actually *under-represented* among the poor and ultra-poor while high dependency households are *over-represented* among these two groups. Thus the concept of labor constrained alone does not appear to be highly correlated with monetary poverty in rural Malawi, though high dependency does. It follows that for the purposes of addressing monetary vulnerability, high dependency would be a better eligibility criterion than labor constrained alone; the SCT approach of requiring both criteria does not add much to a criterion that simply focused on those with high dependency, although it might be more politically feasible to include labor-constrained as a criterion.

We now turn our attention to estimating the targeting effectiveness indicator proposed by Coady et al. in order to assess targeting performance relative to other programs worldwide. The strengths and weaknesses of this indicator are well known and will not be repeated here (see Ravallion 2007)—the main obvious benefit of using it is that it provides a way to judge performance across different programs, targeting mechanisms and countries. To implement the measure we need a common metric of welfare for BU and IHS households. We construct a synthetic wealth index from the variables in Table 1 that are common to both surveys, using principal components analysis (PCA). This method is used to construct proxy means tests (PMT) in many Latin America. It was pioneered in Colombia (Castano and Moreno 1994) where it was used to develop the SISBEN index, and the approach was subsequently adopted (with some modifications) in Ecuador, Argentina and other Latin American countries; a variation of this method which uses linear discriminant analysis is used in the Mexican cash transfer program *Oportunidades* to target rural households (Skoufias, Davis WD paper). However, the most well known application of this approach is in the Demographic and Health Surveys (DHS), where PCA is used to construct the widely used wealth index that is provided with the DHS public use data files. A comparison of the performance of the PCA based wealth index and aggregate consumption expenditure can be found in Filmer and Pritchett (2001) and Handa and Castano Velez (2001). As is typical in this type of analysis, we use only the first principal component to construct the welfare measure—this is the component that typically explains most of the variation among the set of variables.

Recall that the SCT first targets based on demographic criteria (labor constrained or high dependency) and then on poverty. Consequently, we perform two types of assessments; first we compare SCT households with all other households, and then we restrict the comparison to SCT eligible households only (those that are labor constrained or high dependency) and then compare SCT households with this sub-set of households.

Figures 1A and 1B display the distribution of wealth index scores (constructed using PCA on the variables from Table 1) for the IHS and BU samples. Figure 1A includes all households in the rural IHS while Figure 1B reports results when only the subset of SCT eligible households are used from the IHS data set. In each case the distribution of scores from IHS households is shifted to the right relative to BU households; this is particularly true in Figure 1B, which focuses the comparison on SCT eligible households only. Table 3 shows the values for the 25th, 50th and 75th percentile of the respective distributions across the two samples. Relative to the full rural sample, the scores for BU households are slightly lower, with a midpoint of -0.17 (BU) compared to -0.09 (IHS). But when the comparison is limited to SCT eligible households from IHS, the difference in the distributions is much more pronounced, with BU households now noticeably ‘poorer’ than IHS households. For example the midpoint is -1.91 (BU) versus -0.12 (IHS SCT eligible) and the value at the 25th percentile for IHS SCT eligible households is actually closer to the 75th percentile in the BU sample.

The bottom panel of Table 3 presents the quintile distribution of households from each sample, where the quintile cut-offs are defined using the IHS sample only in order to be nationally representative. These distributions are consistent with the previous results; while BU households have lower scores than IHS households, the difference is especially large when comparing SCT eligible households from IHS. The quintile distribution now allows us to construct the Coady et al. targeting indicator, defined as the proportion of actual beneficiaries that are in the stated target group. The stated target group is ultra-poor households, which make up roughly 20 percent of all rural households, so we consider the proportion of SCT beneficiaries that fall in the lowest quintile divided by 20 percent. Relative to the full IHS sample, the number is 1.29 (25.84/20); relative to SCT eligible households (which is likely the more relevant comparison), the number is 3.67 (73.44/20). These indicate that targeting in the SCT scheme is significantly progressive—both these numbers are above 1.22, the median calculated by Coady et al. across 122 poverty programs worldwide. For the subset of cash transfer programs considered by that study, the median was 1.80, which is about half the value found when BU households are compared to SCT eligible households in IHS.

4.2 Targeting Performance in the Kenya CT-OVC Program

We use the same approach as above to investigate targeting in the Kenya CT-OVC. National data comes from the 2005/06 Kenya Integrated Household Budget Survey (KIHBS) conducted by the Central Statistics Office, while data on program participants comes from the baseline household survey conducted by Oxford Policy Management (OPM) in 2007 as part of the quantitative impact evaluation of the programs. As before, the challenge we face is that the expenditure instrument is not identical across surveys. In this case we cannot identify exact portions of the instruments that overlap because the OPM instrument tends to aggregate various foods into one question while the KIHBS instrument maintains each expenditure item separately; it is very unlikely that the bundling of items into one question will give the same answer as asking each item separately so we do not attempt to build a comparable expenditure aggregate from KIHBS as we did for the Malawi IHS. We suspect

that given the way the instruments are set out, the OPM expenditure aggregate will likely understate consumption relative to the KIHBS instrument for the identical household.

We begin the analysis by comparing characteristics that are measured comparably across instruments in Table 4, offering the reader three different sub-samples from KIHBS to compare with program eligible households from OPM. Our choice of characteristics is also dictated by the list of poverty related indicators that the program uses to assess the poverty eligibility of households (see Section 3.1 above). The aggregate per capita expenditure of program households is significantly lower than the national average and corresponding poverty and hard core poverty rates are higher; 78 and 44 percent of program households are classified as either poor or hard core poor, compared to 38 and 15 percent of households in Kenya (note these are household level poverty rates, not population level rates). These rates are likely over-estimates of poverty due to the summarized instrument used in the OPM data but we cannot be sure by how much.

Demographic characteristics of CT-OVC households are somewhat different from the all Kenya and even the poor sample nationally. Program heads are significantly older than poor heads (62 versus 48 years old), have much lower levels of schooling (53 percent have none versus 33 percent among poor heads), and are much more likely to be female (65 versus 31 percent). Beneficiary households are much smaller in size, have significantly more orphans (as to be expected—this is an eligibility criterion) and higher dependency ratios though they have fewer young children age 0-5. In some respects, despite the different definition of demographic eligibility in the Kenya CT-OVC, beneficiary households are somewhat similar to those in Malawi's SCT in the sense that they tend to be headed by older females, have more orphans, have fewer overall members and much fewer young children (pre-school age).

The bottom panel of Table 4 compares housing conditions and livestock possession across the different samples; there are very few differences between generally poor households and CT-OVC households along these dimensions except for the material of walls and toilet facilities, where CT-OVC households appear to be much worse off than other poor households in Kenya. These results suggest that program households are probably poorer than even the poor sample of households from KIHBS as the first few rows of Table 4 suggest.

A key eligibility criterion of the program is that households must contain at least one OVC (see Section 3.1). Table 5 shows that poverty rates for OVC households are somewhat higher than nationally, at 47 and 20 percent for poverty and extreme poverty respectively, compared to 38 and 15 percent nationally. The last column of Table 5 indicates that poverty rates for all households with children (43 percent) are actually somewhat lower than that for OVC households though they are still higher than the national rates. The bottom panel of Table 5 shows the distribution of the poor (and extreme poor) to give a sense of how big these different groups are in the country. OVC households actually constitute 31 percent of all extreme poor in Kenya though they make up only 23 percent of all households, hence they are definitely over-represented among the poor. But what is most interesting (and common throughout SSA) is that households with children dominate

the ranks of the poor and extreme poor—90 percent of the poor (and 92 percent of the extremely poor) have at least one child under 18, though only 80 percent of all households contain a child in Kenya. This suggests that moving away from an OVC targeted program to a general child support program would be quite costly in Kenya.

Following the methodology described previously, we calculate the synthetic wealth indicator for KIHBS and OPM households using a subset of variables from Table 4 based on the first factor only. The distribution of the resulting index scores are shown in Figure 2A, while Figure 2B shows the scores when the KIHBS sample is limited to program eligible households only—those containing OVC. In both cases the distribution of scores for OPM households is to the left of those from KIHBS, though in this case, and in contrast to the Malawi example, the difference is most prominent when compared to the full sample from KIHBS rather than the program eligible sample.

Table 6 presents the actual values for the different wealth indexes. The median value is always lower for the OPM sample; in columns 1 and 2 for example the KIHBS median is 0.10 versus -1.39 in the OPM sample. The quintile distribution of households is shown in the bottom panel of Table 6, where like before, the quintile cut-offs are determined using the national household survey only, and these are used to construct a summary measure of targeting effectiveness. We assume as before that the target population in terms of poverty is the bottom 20 percent of the distribution. Then, from columns 1 and 2, we obtain a summary measure of 3.68 (73.68/20), while from columns 3 and 4 we obtain 2.72 (54.48/20). These numbers are both much larger than the median for all programs reported by Coady et al. and are also higher than the median for the subset of cash transfer programs (1.80) also reported in that article.

4.3 Targeting Performance in the Mozambique PSA Scheme

Our assessment of targeting performance in the PSA employs the 2008 National Multiple Indicators Cluster Survey (MICS), a demographic and health focused survey implemented by the National Statistical Institute with technical assistance from UNICEF. The MICS is supplemented with the baseline evaluation survey of the PSA also implemented in 2008 and covering 892 future PSA beneficiaries; the impact evaluation of the PSA is being conducted by the Center for Inclusive Growth (formerly the International Poverty Center) in Brasilia. Although the PSA survey collects information on expenditures and income the MICS does not so there is no possibility of using a direct monetary metric to compare welfare of households across the sample. Unlike the previous two cases, we cannot construct the poverty rate for program eligible households from MICS in order to assess the appropriateness of the demographic eligibility criteria of the PSA. We thus proceed directly to a comparison of non-monetary welfare indicators and the construction of the PCA wealth index.

Table 7 presents a range of demographic, housing and asset characteristics for the full rural MICS sample, the sub-sample of rural MICS households that fit the PSA demographic eligibility criteria (resident female age 55+ or resident male age 60+) and the sample of actual (future) PSA beneficiaries. PSA households have much older household heads, are

significantly smaller, have fewer children but more double orphans. In terms of assets PSA households do appear to be significantly 'poorer' than either of the two MICS samples, with significantly fewer livestock and household amenities such as radio, telephone or fridges.

Figures 3A (all rural MICS households) and 3B (eligible MICS households only) depict the distribution of the constructed wealth index scores for the MICS and PSA samples. In each case the distribution of scores for the PSA sample is to the left of the MICS sample although in Figure 3A there is a rather long right tail in the scores for PSA households which might suggest leakage to non-poor households.

The top panel of Table 8 reports the distribution of actual wealth index scores for the MICS and PSA samples. The first two columns use the entire rural MICS sample to construct the weights for the index and to build the wealth quintiles, while the results in columns 3 and 4 use only the MICS eligible sample to estimate the weights and quintile cut-off scores. As before, these weights are used to predict the index score for the PSA sample, and to assign PSA households to a wealth quintile. The resulting quintile distribution of households is shown in the bottom half of Table 8. The targeting effectiveness of the PSA using the full rural MICS sample as the comparison group is $(42.69/20)$ 2.13; it falls to $(34.64/20)$ 1.73 when restricting the comparison group to eligible MICS households.

5. Conclusions and Policy Implications

This paper presents quantitative evidence on targeting performance from three African social cash transfer programs that implement CBT. This method of targeting from this region is under-represented in the recent world-wide assessment of targeting reported in Coady et al. covering 122 programs from the developing world. We find that CBT as implemented in Africa can be effective in reaching the poorest households.

The three programs we study all have demographic eligibility criteria in addition to poverty. In all cases the demographically eligible group is poorer than the national average. This difference in poverty between all households and the demographically eligible is especially large in Malawi and primarily stems from the 'dependency ratio' condition which requires the ratio of able-bodied to non-able bodied household members be 3 or larger. In Kenya the OVC eligibility condition leads to only a slightly poorer group of households as does the 'elderly' eligibility criterion in Mozambique.

Table 9 summarizes the targeting performance of each program and compares it to other programs world-wide as reported in Coady et al. Column 1 shows that each of the three African SCT programs have a targeting performance that is better than the mean for the 122 programs assessed by Coady et al. and all do better when restricting the analysis to households with the same demographic eligibility criteria (column 2). Among the sub-sample of cash transfer programs assessed by Coady et al. the mean score is 1.80; both the Malawi SCT and Kenya CT-OVC have scores that are higher than this, while the Mozambique PSA has a score that is slightly lower at 1.73 (see column 2).

Table 9: Summary of Targeting Performance

	<u>All Programs</u>	<u>CT Programs only</u>
Coady et al.	1.22	1.80
	<u>Full Sample</u>	<u>Eligible Sample only</u>
Malawi	1.29	3.67
Kenya	3.68	2.72
Mozambique	2.13	1.73

Targeting performance calculated as share of actual participants in target group. For Malawi, Kenya and Mozambique the target group is set at the poorest 20 percent.

Targeting is an important, and often contentious, aspect of program design. The results from this analysis suggest that CBT as implemented in these cash transfer programs can be decidedly pro-poor. However as Coady et al. highlight, targeting effectiveness is strongly associated with the use of multiple targeting instruments rather than the use of any one instrument *per se*. The programs discussed here use demographic eligibility criteria which tend to focus the CBT on a smaller group of relatively poorer households, and this criterion is particularly useful in Malawi in limiting the set of households to those who are extremely poor. The Kenya CT-OVC also employs a third instrument, the proxy means test, which further strengthens the CBT process and leads to positive targeting outcomes. And as Coady et al. note, ultimately it is the quality of implementation of the targeting instruments rather than the choice of instruments which will affect performance. In that sense then, the results from this analysis are clear—CBT targeting can be implemented successfully to reach the poor in Africa.

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Tables and Figures

Table 1: Characteristics of Malawi SCT Participants and all Rural Households

	All rural	Ultra poor rural	SCT
Per capita expenditure ¹	10653.29	3386.39	2263.31
Per capita food expenditure ¹	6937.67	2264.73	1635.15
Food share	0.62	0.60	0.51
<u>Ownership (1 if yes) of livestock and small tools</u>			
chickens	0.55	0.50	0.11
goats	0.23	0.19	0.01
cattle	0.05	0.04	0.00
sickle	0.61	0.58	0.22
hoe	0.95	0.97	0.88
axe	0.66	0.62	0.30
Beer drum	0.05	0.02	0.01
bicycle	0.38	0.30	0.01
<u>Demographics</u>			
Head's schooling: none	0.29	0.40	0.55
Head's schooling: Std 1-5	0.32	0.33	0.35
Head's schooling: Std 6+	0.38	0.27	0.10
Head's age in years	43.21	45.07	62.20
Household size	4.57	6.09	4.07
# of orphans	1.25	1.95	1.53
Dependency ratio ²	2.03	2.79	3.14
# members age 0-5	0.95	1.37	0.37
# members age 6-18	1.56	2.47	1.68
# members age 0-18	2.52	3.84	2.44
# members age 65+	0.19	0.19	0.68
Observations	9840	1794	817

1/ Annual 2007 Malawi Kwacha. 2/ Members 0-18, 65+ and 19-64 not fit to work divided by members 19-64 who are fit to work. Set to numerator if denominator is 0.

Table 2: Poverty and Malawi SCT Program Eligibility

	All rural	Labor constrained	High dependency	SCT eligible
	<u>Headcount rates</u>			
Poor (%)	46.82	37.33	66.75	63.36
Ultra poor (%)	18.23	13.78	32.47	31.30
	<u>Contributions to poverty</u>			
<u>Share of:</u>				
Poor (%)		10.63	22.92	6.03
Ultra poor (%)		10.07	28.62	7.65
All rural households (%)		13.33	16.07	4.46
N	9840	1304	1593	441

Labor constrained households are those with no person age 19-64 that is fit to work. High dependency is defined as a dependency ratio greater than 3. SCT eligible are households who are both labor constrained and high dependency.

Table 3: Comparison of PCA wealth index score between IHS and Malawi SCT households

	<u>Full rural sample</u>		<u>Eligible sample only</u>	
	IHS	SCT	IHS	SCT
<u>Synthetic wealth score</u>				
25th percentile value	-0.71	-0.87	-0.76	-2.65
50th percentile value	-0.09	-0.17	-0.12	-1.91
75th percentile value	0.60	0.45	0.55	-0.82
<u>Quintile distribution</u>				
Q1 (lowest)	20.00	25.84	20.18	73.44
Q2	20.00	19.63	19.95	10.65
Q3	20.00	19.93	19.95	7.34
Q4	20.02	22.24	19.95	3.92
Q5 (highest)	19.97	13.17	19.95	4.65
N	9804	805	441	817

Eligible sample are IHS households identified as either labor constrained or with dependency ratios over 3. Wealth index constructed using principal components analysis based on the characteristics reported in Table 1 and using IHS households only.

Table 4: Characteristics of Kenyan Households by Sample

	All Kenya	OVC households only	All poor	CT-OVC
Monthly per capita expenditure (Ksh)	3277.31	2371.73	1193.43	1334.29
Poor (%)	38.35	47.42	-	78.07
Hard core poor (%)	14.95	20.13	-	43.71
<u>Demographics</u>				
Age of head	44.88	47.55	47.94	61.96
Head is male	0.71	0.52	0.69	0.35
Head's schooling: none	0.22	0.28	0.33	0.53
Head's schooling: Std1-7	0.33	0.38	0.40	0.35
Head's schooling: up to Form 3	0.20	0.17	0.16	0.09
Head's schooling: Form 4+	0.25	0.18	0.10	0.04
Household size	5.09	6.31	6.20	5.61
No. children 0-5	0.90	1.04	1.13	0.69
No. children 0-17 years	2.53	3.56	3.35	3.33
No orphans	0.34	1.51	0.47	2.50
No members age 65+	0.19	0.23	0.26	0.49
Dependency ratio	1.31	1.86	1.69	2.33
No adult completed Standard 8	0.16	0.17	0.18	0.59
Care giver not working	0.51	0.59	0.62	0.49
<u>Housing conditions and livestock</u>				
Walls made of mud/dung/grass	0.04	0.04	0.08	0.74
Floor made of mud/dung	0.59	0.65	0.78	0.69
Toilet pan/bucket/none	0.16	0.18	0.26	0.57
Drinking water river/lake/pond	0.37	0.40	0.46	0.49
Lighting fuel is wood	0.05	0.05	0.09	0.03
Cooking fuel is grass/dung/wood	0.68	0.79	0.85	0.86
Own 2 or fewer Zebu cattle	0.86	0.82	0.84	0.79
Owns no other cattle	0.86	0.86	0.90	0.99
Owns 5 or less goats	0.90	0.89	0.86	0.92
Owns 5 or less sheep	0.95	0.95	0.94	0.97

Table 5: Poverty and Kenya CT-OVC Program Eligibility

	All Kenya	OVC Households	Households with Children
			<u>Headcount rates</u>
Poor (%)	38.35	47.42	43.12
Hard core poor (%)	14.95	20.13	17.31
Share of:			<u>Contributions to poverty</u>
Poor (%)		28.02	90.16
Hard core poor (%)		30.53	92.8
All households (%)		22.66	80.18
N	13204	2910	10695

Table 6: Comparison of PCA wealth index score between KIHBS and Kenya CT-OVC households

	Full Sample		Eligible (OVC) sample only	
	KIHBS	OPM	KIHBS	OPM
<u>Synthetic wealth score</u>				
25th percentile value	-0.58	-1.90	-0.55	-1.81
50th percentile value	0.10	-1.39	0.17	-1.17
75th percentile value	0.88	-0.73	0.70	-0.44
<u>Quintile distribution</u>				
Q1 (lowest)	20.00	73.68	20.01	54.48
Q2	20.00	11.44	20.01	17.76
Q3	20.00	5.84	19.98	6.40
Q4	20.00	8.40	20.01	6.32
Q5 (highest)	20.00	0.64	19.98	11.04
N	12473	1250	2768	1250

Eligible sample are KIHBS households identified as containing OVC a defined by the program. Wealth index constructed using principal components analysis based on a subset of the characteristics reported in Table 4.

Table 7: Comparison of Mozambique PSA Sample and all Rural Households

	MICS Rural	MICS PSA Eligible	PSA Sample
<u>Demographics</u>			
Age of head	42.21	62.98	67.05
Head is male	0.71	0.56	0.44
Household size	4.60	4.21	2.91
No. children 0-5	1.00	0.54	0.25
No. children 0-17	2.47	1.84	1.06
No. female age 55+	0.17	0.78	0.78
No. male age 60+	0.10	0.47	0.44
Dependency ratio	1.58	2.30	2.02
No. orphans - mother deceased	0.11	0.17	0.13
No. orphans-father deceased	0.23	0.27	0.22
No. orphans both parents	0.04	0.06	0.08
No. children mother absent	0.33	0.54	0.41
No. children father absent	0.71	0.80	0.51
No. children both parents absent	0.22	0.38	0.33
<u>Housing conditions</u>			
Members per room	1.94	1.61	1.39
Source of drinking water	0.46	0.46	0.89
Time to collect water	37.39	44.97	53.95
Toilet with flush or improvements	0.17	0.14	0.05
Floor made of wood/ceramic/cement	0.22	0.23	0.11
Roof made of tile/paving stone/plates	0.30	0.31	0.20
Walls made of brick/wood	0.18	0.18	0.09
Property of house	0.91	0.97	0.97
<u>Assets and livestock</u>			
Motorized vehicle	0.05	0.04	0.00
Radio	0.51	0.42	0.11
Television	0.14	0.11	0.00
Telephone	0.25	0.20	0.01
Fridge	0.08	0.07	0.00
Bicycle	0.40	0.30	0.11
Animal-drawn wagon	0.01	0.02	0.01
Land	0.82	0.88	0.89
Ownership of livestock	0.55	0.59	0.45
Cattle	0.37	0.61	0.24
Sheep or lamb	1.17	1.54	0.50
Swine	0.29	0.34	0.23
Poultry	4.95	5.65	2.13
Observations	13,947	2,998	892

Table 8: Comparison of PCA wealth index score between MICS and Mozambique PSA Households

	<u>Full rural sample</u>		<u>Eligible sample only</u>	
	MICS	PSA	MICS	PSA
<u>Synthetic wealth score</u>				
25th percentile value	-0.69	-1.09	-0.72	-0.96
50th percentile value	-0.15	-0.65	-0.21	-0.60
75th percentile value	0.46	0.00	0.52	-0.04
<u>Quintile distribution</u>				
Q1 (lowest)	19.75	42.69	19.67	34.64
Q2	19.75	18.45	19.69	23.56
Q3	19.73	14.89	19.59	18.79
Q4	19.74	11.86	19.63	15.99
Q5 (highest)	21.01	12.12	21.42	7.01
N	13947	892	2998	892

Eligible sample are MICS rural households with a resident female age 55+ or a resident male age 60+. Wealth index constructed using principal components analysis based on the characteristics reported in Table X and using MICS households only.

FIGURES

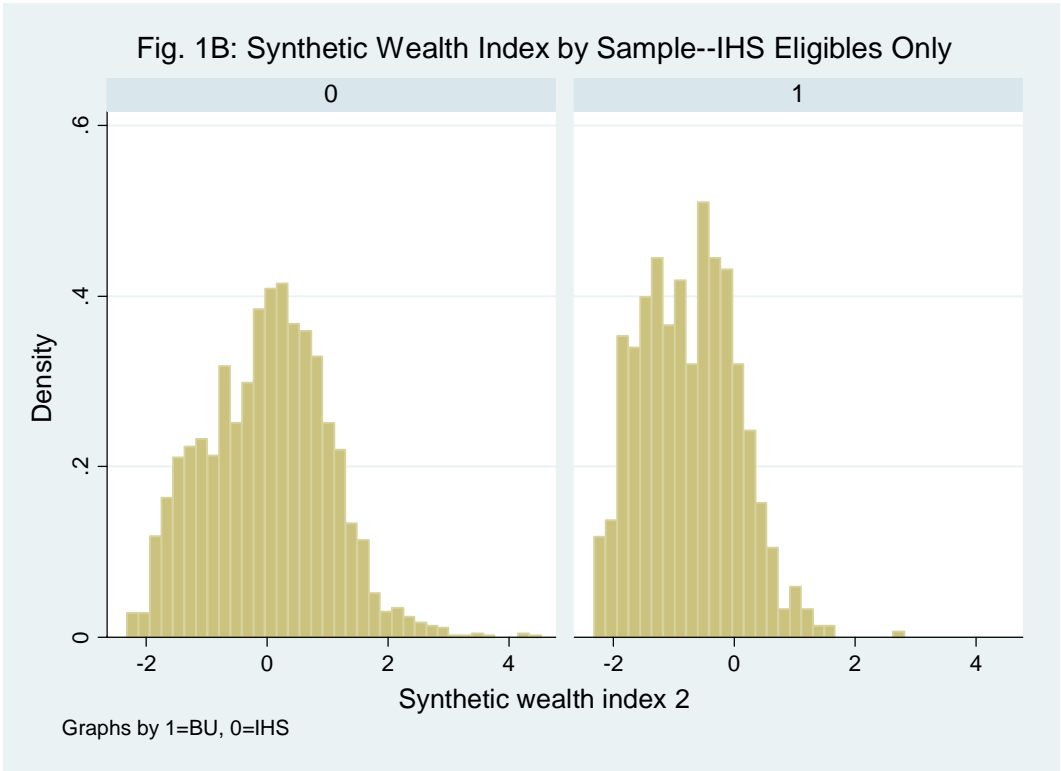
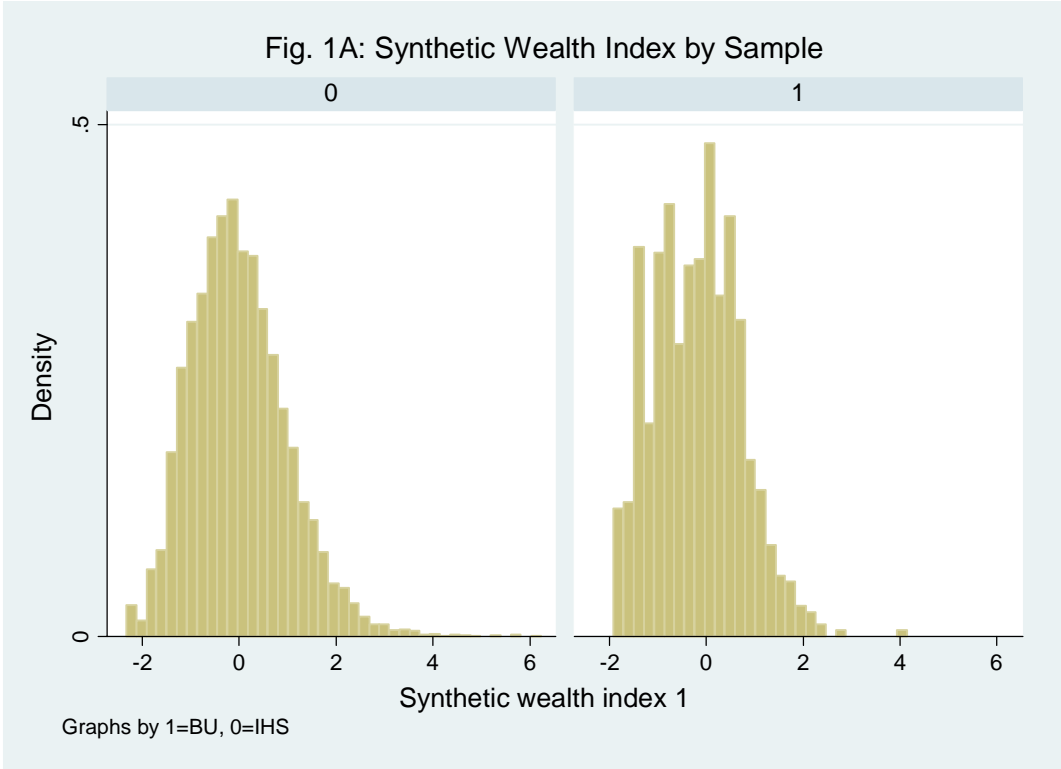
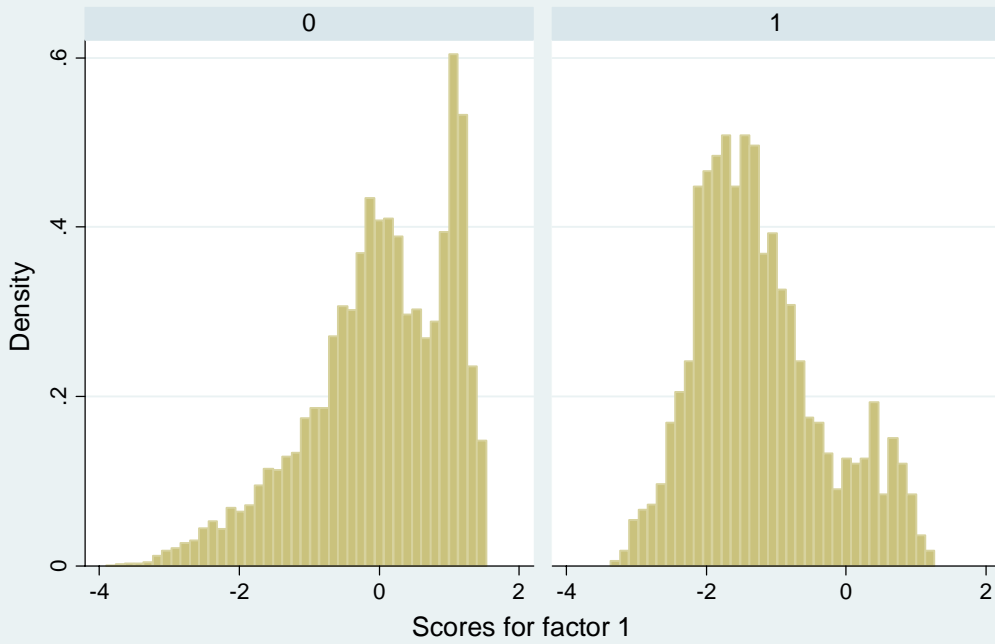
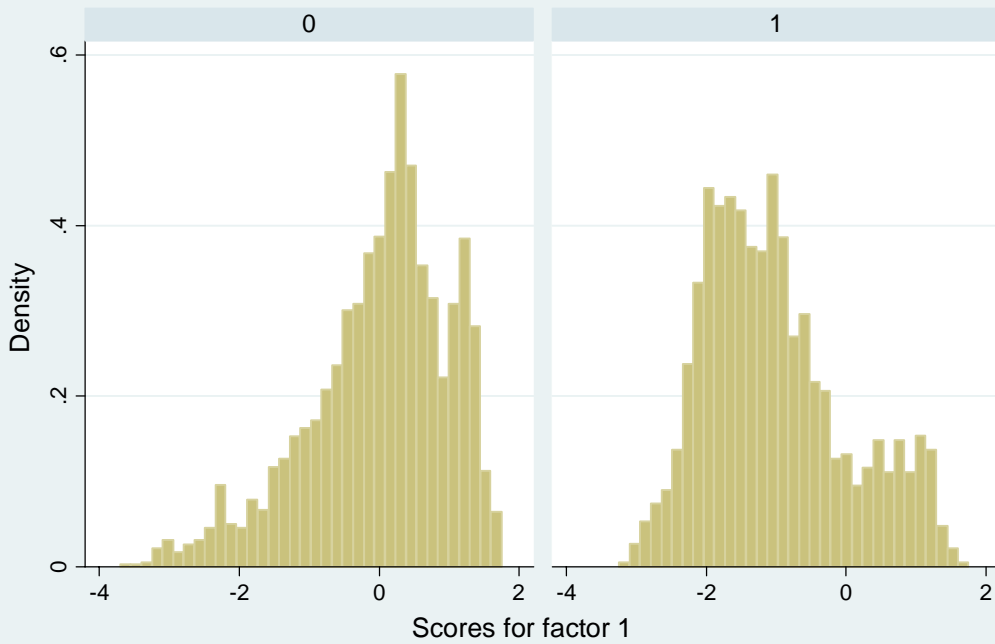


Fig. 2A: Kenya Synthetic Wealth Index by Sample



Graphs by 1 if OPM survey, 0 if KIHBS

Fig. 2B: Kenya Synthetic Wealth Index - OVC Households Only



Graphs by 1 if OPM survey, 0 if KIHBS

Figure 3A: Mozambique Synthetic Wealth Index by Sample

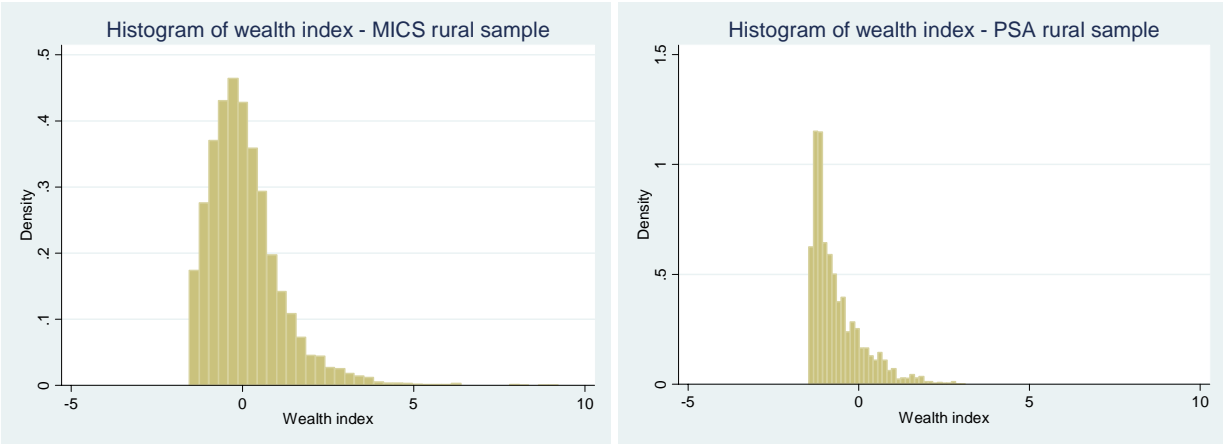
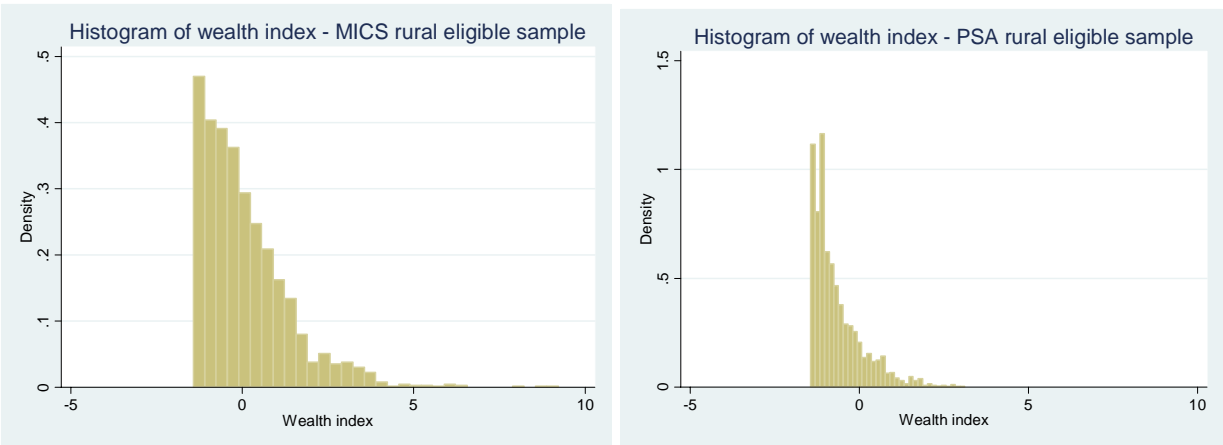


Figure 3B: Mozambique Synthetic Wealth Index: Eligible Households Only



Form 1: Application / Approval Form to Register a Household for the Social Cash Transfer Scheme (Malawi)

District : _____ TA: _____ VDC: _____ Zone: _____ Rank: _____

Name of household head: _____ Village: _____

Name of Representative: _____

Names of Household Members	Relation to Household Head	Age and Date of birth (Date/Month/Yr)	Gender M/F	Fit for work Yes/No +	If unfit for work, give reason/s why	Paternal (P) Maternal (M) or Double (D) orphan? *	Enrolled in School? Yes/No If YES, write Grade	Name of School and Class
1. (Head of Household)								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								

+Only for persons 19 to 64 years of age

*Only for persons under 19 years

Please describe the situation of the household:

Why does the household require social welfare interventions? *Give all the reasons in as **much detail as possible**:*

.....

.....

.....

- What are the sources of livelihood of this household?

.....

- What kind of assets does the household have?

- Which other programmes does the household benefit from?

.....

To be signed by the household head, CSPC interviewers & Headman certifying that all information on the application form is correct

Signature of Household head, Date _____	Signature of CSPC interviewers, Date _____	Signature of Headman, Date _____	 _____
-------------------------------------------------------	----------------------------------------------------------	------------------------------------------------	---------------

To be filled in by the Head of the SCTS Secretariat

Amount due to the household: _____	Application assessed by SCTS Secretariat and recommended for approval / disapproval* Name & Signature of Head of Secretariat: _____ Date: _____	Approved / disapproved* by SPSC on (date): Name & Signature of SPSC Chairperson: _____ Date: _____	Payments will commence on (State Month & Year) _____
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* *Delete which does not apply*

The original has to be filed at the SCTS Secretariat. Copies have to be given to the CSPC and to the approved Head of Household.

* **Total of 2 copies**

