Reaching the Poor: Cash Transfer Program Targeting in Cameroon

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Summary. — Identifying and selecting poor households with efficient targeting methods is essential for effective poverty alleviation programs. This paper assesses the ex-post performance of two popular targeting mechanisms, Proxy Means Testing (PMT) and Community-Based Targeting (CBT), in a pilot cash transfer program in Cameroon. Several indicators and metrics to measure each method's performance in terms of inclusion of poor households and exclusion of non-poor households are employed. Results consistently show that CBT performs poorly in terms of selecting households with low per capita consumption when compared to PMT. CBT appears to select households with low physical and human capital, regardless of actual consumption level. However, CBT also shows more variability in the selection decision than PMT even when alternative poverty definitions are used as robustness tests. The PMT method used in the pilot slightly outperforms other targeting methods (hybrid, alternative PMT, and universal targeting with equal budget), but errors remain high when selecting 35% of the population for program participation. The results suggest caution is needed in employing CBT methods to select households with low per capita consumption in an environment where poverty levels are high and administrative capacities are limited. CBT performance may be improved through more uniform and consistent guidance on program selection criteria and process, including explicit criteria that enable CBT monitoring, as well as a better integration between PMT and CBT.

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1. INTRODUCTION

Effective and efficient poverty alleviation programs require accurate identification and targeting of poor households. The increased use of direct transfers (cash, food, assets) for poverty reduction emphasizes challenges faced by governments and development practitioners in terms of both identification of poor households and generation of mechanism to deliver benefits. Beneficiary targeting is an inherently inexact practice, with both errors of inclusion (providing benefits to households which should not be eligible for the program) and exclusion (not providing benefits to households that should be eligible for the program). Far from being a mere technical consideration, the choice of targeting method and attendant targeting performance has critical implications for both the efficacy of local project interventions and broad-based support for national social assistance policies. Thus it is not surprising that the choice of targeting mechanism generates fierce debates among policy makers, civilian stakeholders, and academics (Coady, Grosh, & Hoddinott, 2004; Grosh, Del Ninno, Tesliuc, & Ouerghi, 2008; Mkandawire, 2005).

The two most common methods for social safety nets targeting in Sub-Saharan Africa are proxy means test (PMT) and community-based targeting (CBT) (Del Ninno & Mills, 2014; Monchuk, 2013; Slater & Farrington, 2009). PMT relies on statistical methods to generate a robust predictor of household wellbeing (usually consumption). CBT relies on community participation to identify poor households. Theoretical and empirical work is available to inform the choice and design of targeting method (Besley & Kanbur, 1990; Van de Walle & Nead, 1995). However the literature is not conclusive regarding what method works best in specific situations (Coady et al., 2004).

PMT implementation usually has two distinct steps. First, a PMT formula is designed from nationally representative datasets where household characteristics (such as household size, roof material, number of animals) are used as weights (through regression-based analyses) as predictors of household welfare. Second, a short survey based on PMT weight variables is administered to potential beneficiaries to compute their PMT score and determine program eligibility. There are a number of stated advantages to the PMT method: (i) PMT is relatively cheap and simple to implement because it is based on data collection for a limited set of characteristics that are easy to observe and verify; (ii) PMT relies on "objective" criteria, which implies credibility, fairness, and robustness to manipulation in targeting decisions; (iii) PMT is based on indicators (usually assets) correlated with long-term well-being rather than short-term consumption, making it particularly suited for identifying chronic poverty; (iv) because indicators are usually observable assets, PMTs often generate less disincentives to increase income, consumption or work participation than other targeting methods. However, targeting errors embodied in PMT targeting design and in PMT process corruption have been observed (Kidd & Wylde, 2011; Niehaus & Atanassova, 2013). Simple ex-ante arithmetic simulations of PMT targeting formulas suggest inclusion and exclusion errors are usually above 20% (Ahmed & Bouis, 2002; Grosh & Baker, 1995; Leite, Stoeffler, & Kryeziu, 2015; Narayan & Yoshida, 2005; Sharif, 2009). Opponents to PMT targeting often point to embodied errors, implementation issues, and

exclusion of the community from the targeting process (Kidd & Wylde, 2011).

Community-based targeting overcomes some of the weaknesses of PMT targeting and has been widely used in Sub-Saharan Africa (Garcia & Moore, 2012). CBT involves communities in a participatory process to select beneficiary households at the local level. Usually, a detailed process is designed by program managers where community elite meet in a village assembly and construct a list of poor households which will be beneficiaries of the program. The process also involves checks and balances to limit clientelism and elite capture. Thus, community targeting has the advantage of: (i) including more *information* from the community, compared to a ''blind'' formula or criteria (Alderman, 2002); (ii) involving the community in a participatory process, which helps generate program support and satisfaction (Robertson et al., 2014); (iii) increasing transparency of selection decisions among potential beneficiaries. [1] However, elite capture, community tensions, clientelism, and other implementation issues are inherent to CBT in practice (Conning & Kevane, 2002; Mansuri & Rao, 2004; Olivier de Sardan et al., 2014; Pan & Christiaensen, 2012; Platteau, 2004). [2]

Careful study of targeting performance is warranted to make informed decisions on the choice of targeting methods. Recent empirical studies of targeting at the micro-level to suggest CBT targeting in Sub-Saharan Africa is mildly progressive (Handa et al., 2012; Sabates-Wheeler, Hurrell, & Devereux, 2014; Schüring, 2014). Ex-post analyses of PMT targeting reached similar conclusions (Maluccio, 2009; McBride, 2014). When PMT and CBT are compared, most studies do not find that one method clearly dominates (Karlan & Thuysbaert, 2013). In particular, studies of specific programs have found CBT tends to select older and smaller households, and, despite slightly lower efficiency, generates higher satisfaction in project areas than PMT targeting (Alatas, Banerjee, Hanna, Olken, & Tobias, 2012; Pop, 2014).

This paper contributes to the emerging literature on social safety net (SSN) targeting by examining the relative ex-post performance of PMT and CBT in a cash transfer project implemented by the government of Cameroon in a very poor rural region in the North of the country. The performance of separate PMT and CBT targeting mechanisms employed by the project are assessed and systematic differences are identified in terms of inclusion and exclusion errors. The analysis has several unique features compared to previous studies. Both PMT and CBT targeting are fully employed in an actual SSN project to determine beneficiaries among each of the 2,084 households surveyed. Household well-being (consumption) is actually observed in a new project baseline survey, and the PMT questionnaire module is identical to that in the national survey from which the PMT is constructed. [3] In addition, a gap in project implementation allows assessment of medium-term targeting performance without shifts in well-being due to project impact. The evaluation of targeting performance first uses popular targeting efficiency indicators (i.e., inclusion and exclusion errors). New indices and non-parametric methods are also employed to study the distribution of consumption levels and to simulate poverty impacts of cash transfers under CBT and PMT selection. Second, household characteristics associated with exclusion and inclusion errors under the two methods are identified econometrically. The role that other information such as exposure to shocks (known by the community but not the PMT) has on community choice is also explored. Third, the potential for integration of PMT and CBT methods to further increase targeting performance is examined. [4]

The main welfare indicator used in the analysis is per capita consumption. Clearly, the metric employed to identify the poor matters, and different metrics will result in the selection of different households (Glewwe & Van der Gaag, 1990; Laderchi, Saith, & Stewart, 2003). In the absence of a universally accepted definition of poverty, per capita consumption is considered to be the best metric given the program's objectives and means of intervention: providing cash payments to the chronic poor (as opposed for example to the provision of health benefits targeted toward ill households). Chronically poor households, arguably, do not have the *means* to realize achievement in most dimensions of well-being, for instance by buying medicine or school supplies. This is particularly true in areas with very high levels of deprivation such as Northern Cameroon. In these situations per capita consumption is a good indicator of chronic poverty and a pre-condition for meeting basic material needs and achieving well-being in other dimensions. While we recognized that poverty is multidimensional in nature (Alkire & Foster, 2011; Sen, 1999; Stoeffler, Alwang, Mills, & Taruvinga, in press), per capita consumption is widely considered as an important component of household well-being and used as a measure of living standards (Basu, 2013; Deaton & Zaidi, 2002). Other metrics are also employed to assess targeting performance (like a food consumption score and a multidimensional poverty index) as robustness tests (see Section 4(c)). [5]

Results suggest that the PMT performs slightly better than CBT in identifying households with low per capita consumption. Compared to PMT selection, community choice seems to be driven by different factors associated with poverty like human and physical capital asset holding. Divergence between community and PMT targeting suggests strong complementarities between the two methods, but these complementarities are not observed to result in better targeting performance of hybrid CBT–PMT targeting methods compared to PMT alone.

The next section describes the project and the data used in the analysis. Section three introduces the targeting indicators employed and the empirical approach. Section four presents results, and the last section discusses policy implications and concludes.

2. PROJECT DESCRIPTION AND DATA

(a) *Project and targeting*

High poverty rates and lack of adequate Social Safety Net (SSN) programs prompted the Government of Cameroon in December 2013 to launch pilot unconditional cash transfer (UCT) programs under the Social Safety Nets Pilot Project (SSNPP) that were specifically targeted to the chronic poor. The specific objective of the pilot was to build an integrated system of social safety nets to address chronic poverty, using cash transfer to the poorest as a central element. [6] Crucial to project success in delivering cash transfer to the country's poorest households is a scalable and cost-effective targeting mechanism. Several ex-ante studies of potential targeting performance in Cameroon suggest that geographic and Proxy Means Testing (PMT) methods can effectively reach poor households (Stoeffler, Nguetse-Tegoum, & Mills, 2015; World Bank., 2011a). However, Community-Based Targeting (CBT) methods have also been commonly used in other settings in Sub-Saharan Africa to effectively target poor households (Handa et al., 2012). SSNPP employs a hybrid targeting method which combines independently completed