"THE DISABILITY GRANT, PRIVATE TRANSFERS AND HOUSEHOLD WELFARE IN A PANEL OF FREE STATE HOUSEHOLDS"

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Abstract

Do public transfers to individuals crowd out private transfers to the households in which these individuals reside, leaving household welfare unchanged? In many developing countries, private transfers to households represent a substantial source of household income, while many transfer-recipient households also qualify for poverty alleviating social assistance. If private transfers to households are purely altruistic, rising household incomes brought about by social assistance will lead to lower private transfers to households ("crowding out"). In South Africa, many people living with HIV/AIDS (PLHIV) simultaneously qualify for a Disability Grant (DG) and free public sector antiretroviral treatment (ART): those PLHIV who become seriously ill qualify for the DG (while possibly losing private transfers); those PLHIV receiving ART may become healthy enough to lose their DG (while possibly gaining private transfers). This paper considers the impact of DG receipt (and transitions in DG receipt) of a sample of Free State public sector ART patients on the composition of household income and household expenditure, as well as the effect that DG receipt/recipient transitions have on household (monetary) poverty and inequality (using Foster-Greer-Thorbecke (FGT) poverty measures, generalised entropy indices, and Oaxaca decompositions). The paper uses patient, individual and household panel data from three waves of the Effective AIDS Treatment and Support (FEATS) study, conducted between 2007 and 2010 in the Free State province of South Africa. Furthermore, multivariate (household) transfer and income/expenditure functions are estimated to determine if DG receipt/recipient transitions crowd out private transfers; the estimation methods used to estimate these functions include fixed and random effects panel data estimators (as well as instrumental variables (IV) fixed and random effects estimators). Finally, to account for possible non-linearities, threshold and spline regression methods are used to estimate the transfer functions separately for the second and third waves (only for DG receipt transitions) of the study.

JEL codes: I38, I32, D13, J12

Key words: South Africa, Disability Grant, private transfers.

Many South Africans are poor, unemployed and in poor health. They depend on transfers for their survival: many households receive transfers from family and kin, while many households also qualify for some form of social assistance from the government (mainly in the form of a social grant). However, if private transfers are responsive to the income of recipient households, then increases in the incomes of recipient households due to their receipt of (poverty alleviating) public transfers might lead to reductions in the transfers that they receive from family and kin, thereby lessening the impact of the public transfer.

For most of the 21st century, the official South African unemployment rate has hovered between 25 and 30 per cent; according to the expanded definition, the unemployment rate lies between 35 and 40 per cent. Meanwhile, the money-metric poverty headcount decreased from 37 to 29 percent between 1993 and 2010, while the multidimensional poverty headcount decreased from 37 to 8 percent over the same period (Finn et al., 2013). Furthermore, South Africa has the largest population of people living with HIV and AIDS (PLWHA) in the world: in 2009, AIDS prevalence among 15-49 year olds was estimated to be about 17% (Uebel et al 2010). The HIV/AIDS pandemic has been found to place substantial financial burdens and hardship on affected households (Bachman and Booysen, 2006; Collins and Leibbrandt, 2007).

Private transfers have long been an important source of income for rural South African households. Migrant labour has long been a feature of the South African economy (Jensen, 2003; Maitra and Ray, 2003 and Sienaert, 2007): due to limited income-earning opportunities in rural areas, many of these households send able-bodied members to find wage-employment in urban areas as part of a household income-diversification scheme. Under colonialism and apartheid, many young African men who moved to cities to find work, had to live in closed, non-family compounds. Even with the removal of apartheid-era restrictions, something similar to the migrant labour system persists, due to economic stagnation and limited employment opportunities in rural areas, high relocation costs (and scarce formal urban housing) and a desire on the part of migrants to maintain their ties to the rural and tribal areas in which they were born (Jensen, 2003; Maitra and Ray, 2003).

With the advent of democracy, the South African social safety net has expanded greatly. Public transfers, mainly in the form of the State old-age pension, the disability grant and the child support grant, now represent a substantial share of personal and household income for many South Africans. Many authors find that large public transfers (especially the state old-age-pension) have substantially lowered the prevalence, depth and severity of poverty in South Africa. However, as Jensen (2003) notes, it is important to explore if these transfers crowd out private transfers: if public transfers do crowd out private transfers, the efficacy of redistributive programmes could be overstated. This is especially true if public transfer programmes are evaluated by comparing pre- and post-public transfer income distributions, without heeding the probable simultaneity between private and public transfers.

Crowding out occurs if individual or household income increases by less than the amount of public transfer receipt: the receipt of public transfers is offset by a reduction in private transfers. To determine if crowding out effects are present, it is useful to suppose that the

welfare (utilities) of transfer donors and transfer recipients are interdependent, and that this interdependence can be captured by the following simple model (Cox et al. 2004): $U_d = U\big(C_d, s, V(C_r, s)\big)$. The subscripts d and r refer to donors and recipients, while C is consumption, V is the indirect utility function of transfer recipients, and s is services rendered by recipients. This utility function is maximised subject to the following constraints: $C_d = I_d - T, C_r = I_r + T$, where T is the value of the transfer, and I is income. The presence and extent of crowding out is then given by the transfer derivative, $\frac{\partial I_r}{\partial T}$: if the transfer derivative is equal to -1, crowding out is complete, while if it is less than -1, i.e. $-1 < \frac{\partial I_r}{\partial T} < 0$, crowding out is less than complete.

Cox and Fafchamps (2007) note that there are three main reasons for private inter-household transfers beteen extended family networks: altruism, exchange and bargaining. The sign and magnitude of the transfer derivative can vary widely depending on which model best describes the motives and actions of donors and recipients. In purely altruistic models, public transfers completely crowd out private transfers.

In some exchange models, members of extended family networks make private transfers to households in exchange for services provided by the transfer-receiving households. These services include helping with home production and personal care, future financial obligations and transactions (loans, securing inheritance), and modifying behaviour to please the donor (Cox et al. 2004). If the amount transferred is $T = ps$, where p is the implicit price of services rendered by the recipient household, and s is the quantity of services rendered by the recipient household, then the sign of the transfer derivative depends on the price elasticity of services demanded by the donor household (Cox and Fafchamps, 2007). In these models, public transfers need not crowd out private transfers.

In other exchange models, private transfers (remittances) form part of household income diversification strategies: some household members migrate from rural to urban areas in search of wage employment, and remit a portion of their earnings back to their households of origin. Extended family and kin transfer networks can also arise as risk sharing (insurance) mechanisms: by pooling resources, these networks can better deal with idiosyncratic income shocks. Under these circumstances, the transfer derivative will be close to negative one.

In empirical studies, the crowding out hypothesis is soundly rejected in high-income countries. Cox et al. (2004) suggest that in these countries, the extent of social safety nets, as well as the duration of these programmes, may have rendered crowding out a "*fait accompli*". The evidence for crowding out might then be found in less-developed countries with their far less extensive social safety nets, and much more substantial private transfers. Most of the evidence for developing countries points towards the presence of incomplete crowding out.

Albaran and Attanasio (2003) find evidence of crowding out in Mexico after the introduction of a (randomly introduced) poverty alleviation programme, which they attribute to the imperfect enforceability of the implicit insurance contract between transfer donors and transfer recipients. But they also note that their findings are also consistent with altruistic and

risk-sharing models. Cox et al. (2004) find large negative transfer derivatives (for those below an estimated income threshold) in the Philippines, after accounting for non-linearities in the transfer functions. Juarez (2009) used instrumental variable estimators to account for the possible endogeneity of (net-of-transfer) income, and found large negtive transfer derivatives after the introduction of a pension reform in Mexico City. Lal and Sharma (2009) also find evidence of partial crowding out in India, after estimating a non-linear income threshold and allowing for non-linearities between non-transfer income and transfers received. Fan (2010) finds that private transfers to elderly Taiwanese decreased after the introduction of a public pension reform in the mid-1990s, but that the crowding out was less than complete. Also, the introduction of the pension reform did not decrease the likelihood of a pensioner receiving a private transfer. Van den Berg and Cuong (2011) find no evidence of crowding out in Vietnam, but note that public transfers are not well targeted, and that the reach of these programmes was very limited.

In South Africa, Jensen (2003) finds evidence of less than complete crowding out in Venda during the early 1990s: during this period, there was a large increase in state pensions for Africans (until parity with whites was reached in 1993). He also suggests that the redistributive effect of the pension, although large, is overstated if the simultaneity of private transfers is not accounted for. Meanwhile, Maitra and Ray (2003) account for simultaneity between household resource flows and the composition of household expenditure, and also find evidence of less than complete crowding out of the public pension in the months leading up to the first democratic elections in 1994, but only for poor South Africans; private and public transfers were complementary for non-poor South Africans (i.e. positive transfer derivative). However, Sienaert (2007) only finds evidence for incomplete crowding out in KwaZulu-Natal between 1993 and 2004 if changes in household composition due to migration is not taken into account; once migration is accounted for, evidence of crowding in (i.e. positive transfer derivatives) is found. This crowding in due to migration is explained by households letting members migrate to diversify household earnings, as part of a risk-sharing strategy.

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