Death and the African Family: the impact of the AIDS epidemic in South Africa

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Abstract

Extended families can distribute the impact of shocks such as adult deaths across multiple households by pooling resources and by exchanging household members. The consequences of the AIDS epidemic in Africa will depend, therefore, on how the demographic and economic dynamics of households interact. This paper uses longitudinal data from South Africa to examine how adult deaths affect households' economic well-being. It then assesses the extent to which households respond demographically to adult deaths by household fission or moves in or out of other adults or children. Finally, it investigates whether these responses offset the economic impact of adult deaths.

The KwaZulu-Natal Income Dynamics Study (KIDS) is a household panel based on 1354 African and Indian households first interviewed in 1993 (May et al. 2000; May et al. 2007). They were revisited in 1998 and again in 2004. The new households of adults with children who move out of panel households are recruited into the study. In 2004 we also followed up children who had been fostered out. The questionnaire used for KIDS is based on that developed for the World Bank's Living Standards Measurement Study surveys (Grosh and Munoz 1996) and each wave of the study has collected detailed information on household income, expenditures and wealth. The study also collects demographic information on both resident and non-resident members of the households, including details of deaths. Although the panel suffered 38 per cent attrition by 2004, its characteristics remain broadly representative of the African and Indian populations of the province according to the 2001 Census.

The analysis builds on previous research with the KIDS data, which found that the economic impact of adult deaths varies depends on initial expenditure per head of the household (Carter et al. 2007). Deaths of young adults from natural causes (including those from AIDS) substantially offset the rise in the standard of living of

non-poor households that occurred between 1998 and 2004, but had little impact on poor households whose standards of living were rising more slowly anyway.

We extend this earlier work to incorporate deaths of middle-aged adults and deaths between 1993 and 1998 and to synthesize the model with one proposed by Grimm (2006) which models changes in household expenditure as a function of initial expenditure, demographic events (i.e. births, deaths, and moves in and out), shocks, and a number of control variables. The analysis exploits the longitudinal nature of KIDS to fit fixed-effects models that control for persistent characteristics of the panel households. We re-weight the data to adjust for attrition using standard methods.

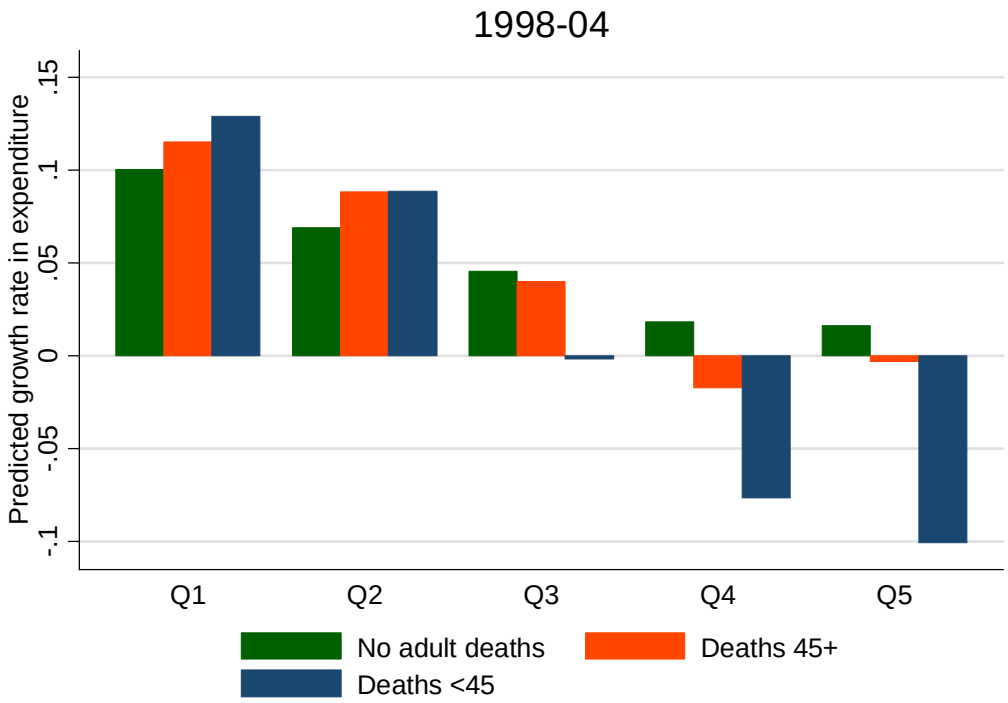

Figure 1: Impact of adult deaths between the 1998 and 2004 waves on the rate of change in *per capita* household expenditure by quintile of per *capita* household expenditure in 1998, KwaZulu-Natal Income Dynamics Study

In line with national trends, the expenditure of KIDS households fell between 1993 and 1998. It then began to rise. Even after allowing for households' fixed characteristics, which operate to exacerbate existing income differentials, the data exhibit a strong pattern of regression to the mean in both 1993-98 and 1998-2004, suggesting that poverty in South Africa has a substantial transitory component (see Figure 1). After controlling for time period, the size and composition of the

household at the start of the period, its initial net wealth and fixed characteristics, adverse shocks other than death, and the time since the most recent adult death, we find that adult deaths have little impact on household expenditure in poor households; the survivors may even benefit slightly from them. Adult deaths in non-poor households have more severe economic implications (see Figure 1). In particular, deaths of young adults, many of which will have been from AIDS, lead to a substantial decline in such households' standard of living. Using a similar model, we find that all households except those in the lowest wealth quintile dis-save following the death of an adult (see Figure 2).

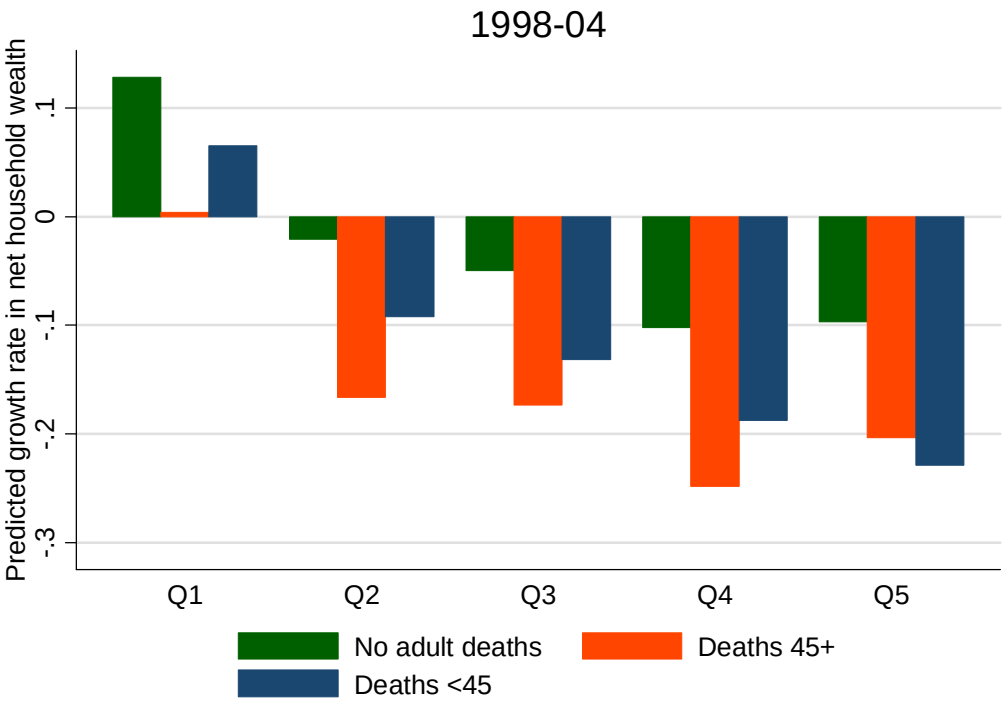

Figure 2: Impact of adult deaths between the 1998 and 2004 waves on wealth accumulation by quintile of net household wealth in 1998, KwaZulu-Natal Income Dynamics Study

Households that foster out children gain a small but significant increase in their standard of living. Fostering is also of economic benefit to the fostered children themselves. We find no evidence that the benefits of fostering are greater in those households where an adult has died. Moreover, although households in which adults have died are more likely than other households to foster out children, the fixed effects analysis suggests that this association is not causal. Instead, these households have unmeasured characteristics that lead to both high adult mortality

and fostering of children. Thus, fostering is not in general the outcome of demographic mishap or economic desperation.

The main cost involved in any premature death is the loss of life that directly results. However, if a death cannot be prevented, it becomes important to understand its consequences for surviving members of the household. This analysis demonstrates that the economic implications of adult deaths vary according to the characteristics both of the person who dies and of their household. Moreover, it is unlikely that the findings of research in any one African country will be applicable to the whole of the region. Agriculture plays a minor role in the livelihoods of most poor households in South Africa and the government's system of mean-tested welfare grants protects most poor people from destitution. In this context, no evidence exists that adult deaths are catastrophic for poor households. They hit households in the middle of the income distribution more severely, preventing them from benefiting from the economic opportunities that have opened up for the majority African population since the collapse of the Apartheid regime.

Acknowledgements

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