

About Briefs

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Abstract

Cash transfer programmes have been suggested as an appropriate approach to reducing vulnerability to food insecurity in southern Africa. Unless limited to small transfers to the elderly or other easily targeted groups, the design and management of a large cash transfer programme will require quantitative poverty measures to set benefit levels, identify beneficiaries and establish the programme cost.

A pilot study was conducted to test an extended version of the household economy approach (HEA), for which national HEA data sets are already available in some southern African countries, to see if this has potential to provide the necessary information for planning large cash transfer programmes. The study compared the results obtained from the extended HEA with estimates of actual household income for the same period. The results were encouraging, although further testing of the approach will be required.

Testing an extended version of the Household Economy Approach in Zambia

'Cash transfer' (CT) programmes are under discussion as an approach to reducing vulnerability to food insecurity in southern Africa. CT programmes have been run in some poorer countries with limited administrative capacity but targeted at easily identified groups, eg pilot programmes in Zambia and Malawi which make a small CT to an arbitrary 10% of the poorest households (Schubert & Kambewa 2005; Schubert 2006).

The statistical information required to support the design and operation of a national CT programme will depend on the programme objective. A CT targeted at a narrow, easily-identified population group will require very little information (eg an estimate of the number of elderly). But a CT programme giving larger transfers with the objective of poverty alleviation would require a measure of poverty and additional information, for example on household characteristics, which could be used to identify beneficiaries. Without this it will be difficult to set a benefit level to achieve the programme objectives, or establish the number of beneficiaries or the programme cost. In most countries this information is not available from national sources.

The 'household economy approach' (HEA) is a simplified method of obtaining household budget data which has been widely and successfully used in south and east Africa for crisis prediction. It has the advantages of reasonable cost and accuracy and several national data sets already exist. Its chief limitation is that the simplification gives estimates only of average values by community-defined 'wealth groups'. As this does not give information on variation in income between households within a wealth group, or the characteristics of those households, HEA does not provide the information required for CT programme design.

The study arose from a request by the UK Department for International Development (DFID) for a practical large-area method which could be used to support CT programming. As a large amount of HEA data already exists, HEA was taken as the starting point. An extension of the HEA method was designed (named HEA+) which logically would, with a small increment to the usual HEA data set, allow a better estimate of variability within wealth groups. The purpose of the pilot study, which was conducted in Kazangula District in southern Zambia and supported by the Regional Hunger and Vulnerability Programme (RHVP) and CARE Zambia, was to test this approach.

The proposed methodology (HEA+)

The standard HEA data set gives information on the average income of each wealth group, and the proportion of the population in each. The rationale of the proposed method was to add a single additional 'very poorest' wealth group to the HEA data set in order to establish the origin of the income distribution: from this an approximation of a continuous income distribution can be derived by fitting a series of straight lines.

Additionally, assuming that it is possible for 'key informants' to identify the HEA wealth group into which any individual household falls, ie if a particular household is in the 'poor' or other wealth group, this would allow the household characteristics in each wealth group to be incorporated into the data set. Information on the characteristics of individual households, for example demographics, asset holdings etc, can quickly and cheaply be gathered by rapid house-to-house survey, allowing for the establishment of a relationship between household characteristics and 'wealth'. Together these would:

- give a more useful poverty estimate than the simple averages obtained from HEA wealth groups, ie a measure of both the proportion of households below a set standard-of-living threshold or some other cut off, and a measure of the severity of poverty within this group. This allows estimates to be made of the cost of transfers to meet specific objectives in each livelihood zone and potentially by administrative area.
- allow estimates to be made of the impact of changes, for example to crop production on poverty levels by modelling.
- give information on the characteristics of households within wealth groups which might provide a basis for targeting.

The study

Practical difficulties were encountered during the study and data was obtained from only one small village (forty households with 212 people).

The economy of the study village primarily was based on rain-fed agriculture (maize, sorghum, millet, groundnuts, bambara nuts and cowpeas, sweet sorghum, squashes and pumpkins), vegetable production chiefly for sale and livestock (chickens, cattle, goats, and pigs). Opportunities for employment were limited. A few households received remittances. Most households were receiving substantial amounts of food aid.

Independent estimates of the household income distribution were made: i) using the extended method, ie HEA with an additional interview of a 'very poorest' wealth group; ii) by collecting income data from each individual households. Additionally one key informant, who participated in the community interview, was asked to place each household in its respective HEA wealth group.

The HEA reference year was taken as 1 March 2005 to 28 February 2006 (a year of low crop yields). Local measures were standardised and standard food values were used.

No difficulties were encountered with data collection from individual households. The HEA interview for the 'better off' wealth group was not of sufficient standard to include in the analysis, and three individual household estimates were omitted. HEA results were standardised by the number of people in each 'typical' household and the estimates of individual household income by the number of 'adult equivalents'. The same prices and food energy values were used for both analyses.

1 For example in Malawi the country has been subdivided into small 'enumeration areas', the borders of which have been reconciled with the borders of districts and other administrative areas, and livelihood zones. This allows HEA information to be expressed in terms of administrative areas, for example where a district contains part of two or more livelihood zones.

Main findings

Comparison of the two income estimates

The comparison of the findings of HEA+ and the individual household income estimates shows a reasonably close fit (figure 2) (within 0.2%, 8.5% 13.5% and 3.9% of the group income for the 'very poorest', 'very poor', 'poor' and 'middle' groups respectively). The relatively poor fit for the 'poor' group is at least partly due to the small number of individual household income estimates obtained and the (presumably chance) irregularity of the income curve.

The relationship between key informant ranking of households into HEA wealth groups and the actual asset holding and income of individual households

HEA wealth groups are defined in terms of productive household assets: the individual household measurements estimate actual household income in the reference year. It is expected that the two measures would correlate, although the strength of the correlation would vary according to the conditions under which assets were employed. For example in a year of drought the amount of land cultivated might be a poor guide to income from that source.

Comparisons were made between: i) the results of the key informant ranking of individual households into wealth groups; ii) a ranking of households based on actual household asset holdings from the individual household interviews; iii) the average asset holding recorded in the individual household interviews grouped according to the proportion of households and the wealth group characteristics established in the HEA community interview.

The correspondence between these measures was very variable. This is attributed to: i) poor production in the reference year, which to some extent delinks assets and income; ii) the distortion of some individual income estimates by asset sales (eg the sale of a high-value asset such as a cow may lift a household from poor to better off); and iii) errors in the key informant ranking.

Conclusions

Given the practical difficulties encountered with this study, the very small data set, and the use of an unsuitable reference year, the best that can be said is that the results are encouraging. There is a close correspondence between the actual household income estimate in the reference year and the HEA+ model. The findings also tend to support the reliability of the HEA data.

Assuming that an HEA data set was already being gathered or an existing data set was being updated, the additional data required for the HEA+ model would add approximately 5-10% to the field work required. This small study is obviously insufficient to establish the validity of the proposed method. Further testing will be required, ideally under conditions where larger samples can be obtained, for example when existing HEA data sets are being updated.

References

- Schubert, B. 2005 "Social Cash transfers-Reaching the poorest". Ministry of Community Development and Social Services. GTZ
- Schubert, B. and P. Kambewa 2006 "Designing a pilot social cash transfer scheme for Malawi". UNICEF Malawi

2 One 'adult equivalent' = the total energy requirement of the household, calculated by age and sex divided by the average energy requirement of a young adult man and woman.

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