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Membership Based Indigenous Insurance Associations in Ethiopia and Tanzania

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Indigenous insurance associations are a prevalent form of membership based organisations of the poor, at least in the rural areas in Ethiopia and Tanzania surveyed by the authors. Results show how villagers with few links to any formal kind of insurance market have established membership-based indigenous insurance associations to protect themselves against unexpected expenditures, mainly for funerals and hospitalisation. Many of these institutions tend to co-exist within the same community and are based on well-defined rules and regulations, well beyond informal reciprocal relations. They tend to offer premium-based insurance for funeral expenses, as well as, in many cases, other forms of insurance and credit to help address hardship. These groups are completely owned and managed by their members. They were locally initiated and have been continually developing through the actions of their own members, without involvement from the government or donors. Using detailed group membership data linked to household survey data we show that (i) these institutions are widely prevalent in the surveyed areas, (ii) households typically belong to several groups at the same time, (iii) they display a large degree of inclusiveness and (iv) they insure an important part of some shocks, but still leave households prone to the effects of risk.

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1. Introduction

This paper discusses a particular form of membership based organisation of the poor: a membership based indigenous insurance association. They are associations of people who have an explicit agreement to help each other in a specified way when well-defined events occur. These institutions are discussed in two rural contexts: Ethiopia and Tanzania. In both countries they have gradually evolved into well-structured groups offering insurance to help cover mainly funeral and hospitalisation expenses. This paper discusses their history, the way they currently operate, their coverage and their impact. As many of these associations focus on funeral insurance, we discuss briefly some evidence on how they have been affected by the HIV/AIDS crisis.

The literature on risk in development economics has analysed both the extent of risk experienced and the responses to risk in developing countries (for reviews, see Morduch, 1995; Townsend, 1995; and Dercon, 2002). One key response is that households try to reduce the consequences of the risk in their income by a variety of risk-coping mechanisms, including engaging in forms of risk-sharing via informal arrangements. The key empirical papers (such as Townsend, 1994; Grimard, 1997; Ligon et al., 2002) as well as theoretical papers (including Coate and Ravallion, 1993; Genicot and Ray, 2003) all focus on "informal" risk-sharing arrangements, which should be understood not only in the sense that they were taking place outside the market place but also that they were "informal" in that they were not based on well-defined "formal" associations, with formally defined, written sets of rules or regulations governing their operation. These institutions are sustained over time on the basis of implicit rules enforced by social norms, so that, once joined, no-one is tempted to defect later when they realise that their own contribution is outweighing their personal and social benefits. However, much recent theoretical literature has shown that norms, or other rules-based enforcement mechanisms, are not necessary for these arrangements to be sustained. In other words, incentive systems within the arrangements can be designed to make the contracts *ex-post* self-enforcing.

There is some work that considers linkages between individuals and households that identify specific people as their insurance partners (Fafchamps and Lund, 2003; Ayalew, 2003; Dercon and De Weerdt, 2002). Even so, these contributions do not focus on groups or associations — but largely on bilateral arrangements with a risk-pooling purpose. This paper goes beyond this analysis by discussing insurance groups; indigenous associations common in developing countries with a specific focus on insurance and with well-defined rules and obligations, in the form of membership rules, specific contributions and fines related to deviant behaviour. In particular, it discusses membership based indigenous insurance associations in Ethiopia and Tanzania, based on a unique data set on the functioning of these groups, with matching household level data on the members.

There is a considerable amount of literature on groups and associations in developing countries and their economic impact. However, most of its focus is on their role as

"social capital".[1] The purpose or functioning of these groups is less relevant in this literature. Other literature focuses on development initiatives using community-based organisations. One strand is related to health insurance, since many initiatives have developed around voluntary but community-based health insurance (CBHI) schemes (Jutting, 2003; Atim, 1998). Although some of the issues involved are comparable to those related to indigenous insurance groups, a key difference is that CBHI schemes tend to develop with clear linkages to NGOs or specific health facilities.

Discussion on membership based indigenous insurance associations in existing literature is very limited at present. In the Ethiopian context, Aredo (1993, 1998) has discussed funeral associations in some detail from an economic point of view. This study is different in that it is directly based on survey data on the functioning and membership of these institutions in a rural setting. There is a limited amount of sociological and anthropological literature on these institutions as well (for example, Pankhurst, 2003). In the Tanzanian context, there appears to be no analysis of these institutions. More generally, Rutherford (2001) has documented the existence of insurance mechanisms for funerals across the developing world. Still, no systematic economic analysis of these institutions can be found in the literature. Although the present analysis is largely economic, it is also informed by anthropological work focusing on the historical context and evolution of the particular format of the institutions.

Many of the groups we discuss are focused on funeral insurance and there are good reasons for this. Firstly, funeral expenditure in much of the developing world is usually large and tends to represent a large proportion of households' monthly income. Roth (1999) suggests that the poor in South Africa will spend approximately 15 times their average monthly income on funerals. Our own surveys also suggest substantial figures for Ethiopia and Tanzania. Rutherford (2001) finds that funeral insurance is one of the most sought-after products offered by more formalised microfinance institutions. Secondly, it is also a highly insurable event in these settings. Moral hazard is unlikely to be relevant for insuring a funeral whereas, given relatively high mortality, it is a common event in families, but still typically with relatively low covariance.

The next section will present the basic characteristics of these groups based on unique survey data in both countries. The insurance cover provided and the basic functioning and history of these groups will be discussed. Section 3 goes on to discuss how different groups in the same location relate to each other and how a localised insurance market emerge. Section 4 discusses issues related to inclusion, exclusion and impact. Section 5 puts the emergence of these groups in an historical context, while Section 6 looks at the available evidence of the influence of the HIV/AIDS pandemic on these groups. Section 7 concludes.

[1] Using Putnam et al. (1993), social capital can be defined as referring to features of social organisation, such as trust, norms and networks that can improve the efficiency of society. In particular, the focus is on the external effects of community relations on outcomes of interpersonal interactions: "strong" social capital tends then to be associated with economic success.

2. Basic Characteristics

A membership based indigenous insurance scheme is a locally initiated association of people, who have voluntarily entered into an explicit agreement to help each other when well defined events occur. We call these organisations indigenous because they have grown from within the community, without any direct outside involvement. We call them membership based, because the group is completely owned and managed by its beneficiaries. They are voluntary because no one is under strict pressure to become a member of a particular group, definitely not compared to the stricter kinship-based systems.[2]

We have data from two rural contexts, in Ethiopia and Tanzania, where such institutions are prevalent and important in people's livelihoods. First, there are data from a number of communities in rural Ethiopia, studied as part of the Ethiopian Rural Household Survey. This survey has been collecting panel data on households and communities since 1989, focusing on 15 communities from across the country.[3] In this study, data are available on funeral societies in those villages. In total, detailed data has been collected on 78 funeral societies in seven villages[4] — about half the number of funeral societies present in these villages. In one village, the data were matched to the households in the household survey, allowing some more detailed analysis. The village in question consists of the communities in Sirbana Godeti, a relatively prosperous village in Oromiya Region in central Ethiopia, where about 30 funeral groups were identified, about half of which were studied. Additional data from communities in Southern Ethiopia complement this analysis, although for the time being these data are not fully analysed.[5] It should be stressed that some of the detail of the way the organisations function is different across rural and urban Ethiopia, but most of the fundamental characteristics are common across large parts of the country. In Ethiopia, the funeral associations are known as the iddir (e'dir) — associations that ensure a payout in cash and in kind at the time of a funeral for a deceased member of the family of a member of the group.[6]

The second context is a village in Kagera Region in Western Tanzania, called Nyakatoke, relatively close to the Ugandan border, near Lake Victoria. A detailed census of all community organisations and informal networks, with an emphasis on insurance-based linkages, was conducted — details are in De Weerdt (2004). Over 40 groups were identified and 20 of these groups were classified as having a prime insurance function and were included in the analysis. The "traditional" funeral society, the *Bujuni* covers the basic funeral insurance, but several groups surround this to give additional insurance.

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[2] In Tanzania, there is some social pressure to be part of at least one women's group. Women not part of a group are considered anti-social and uncooperative. Still, they are free to choose which group to join, or even to set up new groups.

[3] Details of the overall survey are in Dercon and Krishnan (2003).

[4] "Village" is used to mean a Peasant Association. Rural Ethiopia is administratively divided into Peasant Associations, which are a collection of communities.

[5] The data on Sirbana Godeti were collected in 2002, but the data on the other villages were only collected from October to December 2003, and are not yet matched to the household data.

[6] 'Iddir' is the generic name. In some areas, other local names are used – such as 'kire' in parts of Wollo. They are all referred to as iddir in this paper.

They include seven Women's Associations, themselves united in the *Muungano* (the Union of Women's Groups), four neighbourhood and five religion-based groups.

In strong contrast to informal networks of neighbours and friends, these associations have clearly defined membership lists. By no means do these groups consist of a loose, rapidly changing association of people. Membership is confined to founding members and those applying to become members afterwards. In both contexts, there is a membership fee to be paid when joining after formation. A number of instances were found where groups have particular restrictions, such as by gender or age. Payments are made when members incur costs related to funerals or hospitalisations (sometimes also other events, see below). The payout is conditional on the relationship of the member to the deceased: for example, the payment for the spouse of a member can be different from the payout for a child or for uncles and aunts. Table 1 identifies the defining elements of a membership based indigenous insurance association.

Table 1: Defining Elements of Membership Based Indigenous Insurance Associations

Membership Based	Owned and managed by its beneficiaries. There are founding members and there is membership by application. Typically there is a membership fee. Sometimes there are restrictions to membership (e.g. only certain religions, member has to be above a certain age or has to be a woman)
Indigenous	Grown from within the community, without outside intervention. Different, for example, from a credit group that has formed with the specific purpose of accessing an NGO's credit scheme.
Insurance	For well-defined events, there is a payout in cash, in-kind and/or in labour. Often it will also include the use of capital goods (e.g. sheets to make tents for guests)
Association	They are formed explicitly and no one is automatically a member (as is e.g. the case in kinship networks). Clearly defined membership lists.

Although payouts systems differ widely between the two study areas and per insured event, a unifying element is that they occur both in cash, kind and labour. In-kind payouts can be, for example, food, grass for the funeral guests to sit on, or the use of capital goods that the group owns, like big cooking pots or sheets to make covers against the sun. Contributions in labour are given at the funeral or hospital, but also to catch up with lost days of labour on the farm.

The payout systems are quite refined and in both contexts, there are written statutes, bylaws and records of contributions and payouts. There will also be rules defining membership procedures, payout schedules, contributions and also a set of fines and other measures for non-payment of contributions, or for matters such as failure to attend funerals or not contributing enough in terms of labour on these occasions.

Finally, one of the most remarkable findings of the work in these communities was the very large number of membership based indigenous insurance associations in these communities. In Sirbana Godeti in Ethiopia, a community about 400 households, about 30 iddirs were found. In some other villages in Ethiopia, a somewhat more modest number seems to be present but still five or more; but in a number of villages the number of iddirs was well above 50 and more — in Imdibir, one of the study villages, the study

was able to identify about 80 to 100 groups, albeit not all just covering the village, but with substantial membership in the village, despite having only a population of about 350 households. In Tanzania, the village studied (Nyakatoke), had a population of 120 households only, but 20 insurance groups were identified. It is obvious from this that people can and usually are members of more than one association — see below for more on this.

What type of the insurance provided by these groups? All groups in Ethiopia propose funeral insurance. In Tanzania, all but one group provided funeral insurance (the exception being a small group of 18, with only two members from the specific village) and 13 groups provide hospitalisation insurance. Table 2 gives the benefits paid out by groups for funerals (in the scenario wherein the member dies; this is usually the maximum payout) and hospitalisation insurance when the member is admitted to hospital and spends at least one day there (only for Tanzania). At the relevant exchange rates, the payout for funerals in both countries is approximately €20 on average per group. Note that the figure for Tanzania includes in-kind benefits (in terms of food) of approximately of 80 per cent of this figure. For Ethiopia, these figures do not include the in-kind benefits, although they exist but are generally more limited: in about a quarter of cases, some in-kind benefits were reported in Ethiopia, but relatively modest in value (usually coffee and *injera*, the basic staple food made from teff)[7]. In Tanzania, all groups reported in-kind contributions which, in all but one case, were more substantial than the cash contributions. These calculations do not include some labour services provided in a minority of cases in both countries. In Tanzania, the seven women's groups ask members to help at the funeral typically for one day, but this is not done by any of the other groups. In Ethiopia, about half the groups contribute labour (beyond the funeral) as well — typically one to three days of labour per member, including farm and related work. Especially in Ethiopia, this contribution is particularly substantial.

Table 2: Payouts for Funerals (in case member dies) and Hospitalisation

	Mean	Standard deviation	Median
Tanzania (in TSh)			
Funeral	16,655	16,477	13,000
Hospitalisation	3,856	3,461	3,000
Ethiopia (in Birr)			
Funeral	206	177	150

Source: Own data. Tanzania includes on average TSh 13,598 of in-kind benefits for funerals and TSh 744 for hospitalisation. Ethiopia does not include in-kind benefits. Exchange rates at the time of the surveys: €1 = 10 birr and 800 Tanzanian Shilling.

In Tanzania, 13 out of the 20 organisations also offer hospitalisation insurance: a fixed payout usually in cash but sometimes some labour whenever the member or close family is admitted to hospital and a relative has to stay with the person. The average payout is about €5 per instance, well below the payouts in the case of a funeral, but still significant.

[7] This may be different in other areas of Ethiopia, not surveyed. Mariam (2003) reports on iddirs in Southwestern Ethiopia only providing in kind benefits to their members in terms of food, materials and labour in the case of a funeral.

Table 3 summarises a number of crucial differences between the two contexts. For example, in Tanzania, the main groups expected members to provide their cash and in-kind distribution at the moment the death is announced. In Ethiopia about 80 percent of the groups were charging a regular contribution, usually monthly, from the members.[8] In the village studied in more detail, all but one iddir operated on this principle. In more urbanised contexts, this percentage is close to 100 per cent. There, virtually all groups discussed actually pay a monthly or similarly regular contribution (Pankhurst, 2003).

Table 3: Premiums, Asset holdings, Entry Fees and Group Size in Ethiopia and Tanzania

Source: data collected by the authors.

Ethiopia	Tanzania
Usually, regular contributions in cash (average about €0.16)	Contribution only when the funeral takes place
Cumulative Asset Holding, largely in cash (mean=€190).	Limited assets (durables)
Usually relatively substantial entrance fee (mean=€4 per family).	Relatively limited entrance fee (mean for women's groups=€1)
Mean group size is 84 (median=55)	Mean group size is 24 (median=18)

A key consequence of this phenomenon is that some of these groups retain very substantial savings. In fact, in the full sample (i.e. including those not charging a fixed regular contribution), asset holdings were on average about 1900 birr (€190), a substantial sum in a country with a yearly GDP per capita of only about €100. Many iddirs were found to have much more in terms of accumulated savings; the highest sum reported was about €3000. Obviously, regular membership contributions and group sizes play a role here as well. Average contributions per month per member of the 63 Ethiopian groups charging a regular contribution (either weekly, fortnightly or monthly) were 1.64 birr per month (the median is 1, the range was 0.25 to 5 birr, the standard deviation is 1.44). Contributions are fixed per member, irrespective of age or family size. Groups in Ethiopia were also charging substantial entrance fees for anyone currently wanting to join: about 42 birr, or 25 times the monthly contribution. Interestingly, about 40 per cent of groups reported setting these entrance fees as a fixed contribution, the rest suggested a formula based on the current assets and property per member. Furthermore, groups in Ethiopia were larger, on average about 84 members, with a median of 55, compared to an average size of 24 (median 18) in Tanzania.[9] Although a few very small iddirs were found in Ethiopia, in each of the seven villages the average size is larger than in Tanzania.

[8] Most of these groups would also ask for a fixed additional contribution at the time of a funeral.

[9] Mariam (2003) reports even a mean group size of 175 in his sample of 52 iddirs.

3. The Emergence of an Insurance Market

This section discusses the inter-linkages between groups in the same community and aims to show how a localised insurance market emerges. Some of the surveyed Tanzanian groups make membership conditional on membership of *other* groups in the village. For example, the women's groups are clearly providing supplementary insurance over and above the village level burial society, the *Bujuni* (which is the Haya word for "mutual help"). The women's groups explicitly state this in their statutes: only women from Nyakatoke whose husband is a member of the village burial society may belong. The insurance they offer is meant to cover expenses not covered by the burial society. The neighbourhood and religion-based groups are similarly providing supplementary cover.

The Ethiopian groups typically do not have terms of conditional membership and households are usually free to join as many, or as few iddirs as they want. Most villages have a number of iddirs, largely differentiated in terms of the amount of cash offered in the event of a funeral and, related to this, the regular contribution paid. Although the groups spoken to in Ethiopia clearly emphasise funeral insurance, a substantial number offer other benefits to their members. First, about 64 per cent of groups offer loans to members, provided the funds are available, with clear (and strictly enforced) rules governing repayment. Members have to present a case for obtaining a short-term loan, and the most commonly accepted reasons are additional funeral spending, illness and destruction of a house — to put it differently, short-term credit is offered to provide additional cover, mainly for shocks. Secondly, 64 per cent (but not necessarily the same groups as those offering loans), offer other forms of insurance, but the cover offered is clearly dependent on the group. Table 4 summarises the types of insurance they offer and it is clear that each group that provides additional cover offers only a limited set of other benefits, such as fire and house destruction insurance. About 30 per cent of the groups offering additional cover provide payouts in case of serious illness in one way or another. Note that in all cases no additional separate premium is charged, but all is included in the basic premium[10].

Table 4 Types of Additional Insurance Offered in Ethiopian Iddirs (as a percentage of those groups offering additional cover)

Destruction of House	40%
Illness	30%
Fire	28%
Death of Cattle	24%
Harvest	14%
Wedding	14%

Source: data collected by the authors.

[10] In a study by Mariam (2003) of 52 iddirs in mainly rural Ethiopia, similar results were found. The study reports that, besides funeral expenses, insurance and/or credit was also given for house fire (44 per cent) and illness episodes (20 per cent).

The surveyed groups in Tanzania, in contrast, offer a wider variety of insurance products. For example, Bertha's group has 11 members and offers TSh 100, 30 fingers of bananas and 3 bowls of beans when there is a funeral, while Eles' group has 17 members and offers 3kg of meat, 2 hands of bananas and 5 bowls of beans.[11]

But groups will differ in more than just the premiums and payouts they maintain. In the Tanzanian context a woman typically moves to the village of the husband upon marriage. If a funeral occurs in her home village then it is typically expensive for her to attend this as there are transport costs, contributions, presents, clothes, etc. to be bought. Some groups in Nyakatoke extended their coverage to also include funerals on the woman's side of the family. Subscribing to such a scheme will increase a woman's bargaining power vis-à-vis her husband when deciding whether or not to attend a funeral in her home village.

These groups are completely owned by their members and one manifestation of this is how innovations occur. For example, in Tanzania, the main groups expected members to provide their cash and in-kind distribution at the moment the death was announced takes place. It usually only takes one day for the group to get organised. That means that the first day there will be no contributions, but still visitors will start pouring in they need to be catered for. Therefore some people have organised themselves in *mwatani wabaki* groups that hold stocks of beans (collected after the bean harvest), own some cups and saucers and have a commitment to be ready to help from the first hours.

Clearly, there is an element of choice of product in these communities and people can express their preferences for different insurance packages. Furthermore, as they are in a very real sense the 'owners' and the 'beneficiaries' of these insurance schemes they are guaranteed to be engineered in a way that benefits the members most.

A last example of an innovative insurance market structure comes again from Tanzania. As noted before, there are 7 women's groups in this community. After a period of working independently they decided to join in a super-structure called the *Muungano* or the Union of Women's Groups. The *Muungano* provides a minimum package of insurance when a member is hit by a funeral or a hospitalisation. Outside of this insurance package through the *Muungano*, each women's group is free to add on additional feature to the insurance package, but then only for its own members. The *Muungano* does not have individual members, rather each of the 7 groups is a member of this super-structure. It is the group rather than the member that is responsible for paying the premium. That means that monitoring and enforcement occurs within groups of 8-20 people, but insurance is obtained from a pool of over 100 people. This is of course is very similar to the idea behind group-based lending made famous by the Grameen Bank. The main difference is that in Nyakatoke it grew completely from within the community without outside interventions aimed at creating these groups.

[11] Groups that have no name are identified by the name of the chairperson.

4. Inclusiveness and Impact

These insurance groups are remarkable not only by their functioning but also on account of their widespread membership. This section looks at what determines membership, how much protection is offered and how important this insurance is for its members. In the sample of 15 Ethiopian villages (the ERHS), it was found that about 80 per cent of households were members of at least one iddir. However, after excluding two villages in the most Northern region of Tigray, where, apparently, these institutions are not yet present, membership is virtually comprehensive. They could be found in all the other villages included in the sample and, in almost all villages, more than 95 per cent of households were members of at least one group.[12] In one village, Sirbana Godeti, where groups were matched with household data, it was found that households were members of up to eight groups and, on average, a member of between two and three groups. In Tanzania, with data on only one village, about 95 per cent of household were members of the village level Bujuni. Almost all households with a female adult took out additional insurance from one of the seven village women's groups. Overall, households are members of about three groups.

The widespread membership across the population suggests that these groups are quite inclusive. Even though the percentage of people not included is relatively small, it is still relevant to explore who may not be included in these schemes. The Ethiopian data[13] was used to investigate whether membership was affected by socio-economic characteristics. It was found that the probability of membership increased with the age of the head and with household size. This is consistent with people typically only considering joining iddirs after they marry and start a family. There was no effect from current living standards.[14] Mariam (2003) suggested that in his sample of 1200 households, mainly in rural Ethiopia, those not members were either newly arrived migrants, who were not yet well established in the area, or those not yet married but already cultivating their own land as an independent family member. In Tanzania, the few not included in any scheme were not significantly different from others. In both contexts, funeral groups were originally based on ethnicity, religion and kinship, but the large number of different groups available means that there everyone could in principle be a member of some group. For Ethiopia, Mariam (2003) added that all iddirs in his sample area now state that

[12] Other surveys confirm the widespread membership. Open-ended questioning on which social organisations households are members of in a sample in South Wollo collected found about 80 per cent of households to be members of at least one iddir (Mogues, 2004; Mariam, 2003) reported in his survey of about 1 200 households in 40 largely rural communities in Ethiopia that 87 per cent of households were members of an iddir.

[13] This analysis uses the 4th round of the data (from 1997) which included specific questions on membership. Membership in that round of the data was about 75 per cent – below the estimate from other rounds – possibly due to slight underestimation related to less precise use of the local terms to describe the funeral societies, affecting data collection in two villages (one in Northern Shoa and one in Daramolo). The regressions used a probit model, using community level fixed effects.

[14] In particular, current consumption levels are not significant. Land holdings are also not significant, while there is a very small effect from livestock holdings, increasing the probability of being a member, but the marginal effect is very small and only significant at 11 per cent.

anyone in the same locality, regardless of religion or socio-economic status could apply to be members. In Tanzania, qualitative interviews with members and non-members confirmed that once one is willing to adhere to the rules of the group and give timely contributions when the rules so demand, there is likely to be no objection to anyone joining a group.

However, in both cases there is evidence that the extent of coverage is higher for richer households. In both contexts, households can be members of different groups. As a result, people can choose to have more insurance coverage by joining more groups, or by joining groups offering higher insurance linked to higher contributions. This is investigated further in both data sets. In the data on Nyakatoke, an investigation on the coverage taken out by households suggested that the mean funeral coverage was equivalent to about 21 per cent of total yearly household consumption (while health coverage offered was on average about 2 per cent). In Ethiopia, it was not possible to analyse coverage on the full data set, but there is data on total payments over a four-month period in 1997 by households to iddirs, which will give a good indication of the coverage they could themselves receive. Table 5 reports the result of simple regression analysis, linking the funeral coverage (Tanzania) or total contributions (Ethiopia) to a set of characteristics. For the Tanzanian data, ordinary least squares were used; for Ethiopia, where about a fifth of households did not spend on iddirs, a tobit model was used. In Ethiopia, the regression controls for community fixed effects, so the focus is on within-village differences. The characteristics used were household size, age of the household head, whether the head had completed primary school, sex of the head and a set of (cumulative) dummies for wealth (based on the overall consumption levels). The Tanzanian data also allow for controls for the location within the village and for the shared genetic stock with other people in the village.

Table 5: Determinants of Funeral Coverage/contributions per Household

	Tanzania Total funeral coverage per household (ordinary least squares)		Ethiopia Total contributions per household (tobit model with community fixed effects)	
	Coefficient	p-value	Coefficient	p-value
Household size	4601.6	0.026	1.452	0.000
Age of household head	272.1	0.471	-0.046	0.193
Primary school completed?	-1937.0	0.875	-2.794	0.113
Sex of head	-1265.9	0.933	2.811	0.027
Genetic share*1000	1065.2	0.087	-	-
Distance to centre of village	6.5	0.863	-	-
Richest 75 percent (dummy)	32741.2	0.040	2.568	0.092
Richest 50 percent (dummy)	-17264.6	0.275	2.308	0.109
Richest 25 percent (dummy)	7208.1	0.634	3.055	0.039
Constant	62.1291	0.058	-24.602	0.000
R-squared	0.135 (adjusted)		0.0654 (pseudo)	

Note: Genetic share is defined as the extent of blood relationship with other people in the village; richest 75 percent is a dummy one if person belongs to the 75 percent highest levels of consumption per adult; richest 50 percent and 25 percent are similarly defined. Note that for the richest 75 percent, the three dummies will have the value one. The poorest group is excluded. Sample size for Ethiopia data is 1260; for Tanzania 120.

The regression suggests that larger households take out more coverage, which suggests that they respond to the incentives given in the scheme: larger households stand to benefit more from the system. In all groups, the policy covers all members of the household irrespective of total household size. However, there is no extra cost when insuring extra individuals within a household — so it is relatively more advantageous for larger households to join. The other key effect is that the poorer households have significantly less insurance. In the Tanzanian data, the richest 75 per cent dummy is positive and significant, while no other wealth dummies are significant. The size of the wealth effect suggests that in Tanzania, the poorer have typically 25 per cent less coverage than the average household. Similarly, in Ethiopia, contributions systematically increase with wealth, and there is clear evidence of the richest 25 per cent insuring themselves significantly more than the rest.[15]

A further issue is the composition of the groups: who joins what type of group? Is there any evidence of matching or selection in the group composition? Assortative matching is typically considered as a benefit in terms of being able to save on information and enforcement costs — it is often suggested that similar people will find it easier to monitor and enforce contracts (Hoff, 1997; Ghatak, 1999). Nevertheless, analysis of the group composition in the matched data of households and groups in both countries found only limited evidence of matching. For example, there is no evidence that richer people joined specifically particular groups. In De Weerdt (2004), this was found to be rather different when investigating pure "informal" linkages between households in the Tanzanian sample (where linkages were defined on the basis of household and individual level questions on "who would you turn to for help?" and "to whom would you give assistance?"). The evidence showed that wealth and geographical distance mattered significantly and strongly in determining these linkages. In other words, this suggests that these more formal organisations can afford to allow people from a more diverse background to become members, presumably since clear rules and regulations can compensate for some of the informational and enforcement advantages of social and geographical proximity.

Finally, how important is funeral protection for the households involved? Funeral costs are very substantial — although the full costs are hard to estimate, but definitely a significant proportion of a month's income. In Ethiopia, the average cash payout per iddir is about 40 per cent of monthly household consumption (and the average household is usually a member of more than one group), so iddirs are crucial to allow households to cover these expenses. In fact, the Ethiopian Rural Household Survey data suggest that for

[15] It is standard practice to have multiple memberships of groups as a means of increasing coverage. Alternatively, it could be asked why they are not choosing to increase contributions in the existing groups to get more coverage. When discussing this with the groups, it was argued that the only feasible group structure is one in which everybody contributes the same, so that coverage is identical among members. Furthermore, it was often hard to find consensus among all members to increase contributions once a group is established so that for a member to obtain higher coverage, the most feasible route would be to also join another group, unless enough people can be found willing to set up a new group with higher coverage, and leave the original group. Membership fees limit the incentives for this behaviour.

the poorest wealth quartile, monthly payments to the iddir are about 40 per cent of total monthly health expenditures — and for the richest groups still about 30 per cent.[16]

In Tanzania, payouts per group to the household are about 25 per cent of average monthly consumption, while households are typically a member of about three groups. In short, these sums are substantial, and given the large expenses required for socially acceptable funerals, the funeral insurance groups perform a crucial role in these communities. However, one should not forget that, apart from this substantial insurance, much risk remains uninsured resulting in substantial welfare fluctuations and losses — for example, see Dercon and Krishnan (2000) and Dercon and De Weerdt (2002). Dercon and De Weerdt (2002) found that health shocks were causing households to cut back on average about 20 per cent of non-food expenditure in the Tanzanian sample. In Ethiopia in 1994-95, more than 10 per cent of households drifted into poverty directly related to shocks..

5. History

It may be tempting but wholly misleading to consider these insurance groups as age-old traditional institutions. There is no doubt that mechanisms of mutual support would have existed in traditional society, but this does not imply that the currently observed associations are just replicas of these mechanisms. In this section, a brief discussion of the origins of these institutions is presented — more details can be found in Pankhurst (2003) and De Weerdt (2001). The main point in this section is to show that these institutions are best understood as organisational structures developed in interaction with the general socioeconomic and political context, and that they evolved in response to changes in this environment.[17] Some of the existing literature on these institutions in Ethiopia appears to take issue with this view, not least with some of the detail involved (Aredo, 1993, 1998). For example, Aredo (1998) suggests that these institutions may even have existed in the 19th century — even though there is no clear evidence in written sources on this, and our own investigations in the same field setting as Aredo suggest that the basis for this claim is weak. In any case, much more work is needed to properly settle some of these issues.[18]

In the debate about the origins of the iddir in Ethiopia, a number of interrelated issues have been debated. First, is it basically a rural institution transposed in an urban setting or is it an institution that emerged in the context of urbanisation and then spread to rural areas? The answer depends on what is meant by iddir. Societies across the world have

[16] The fact that the poor spend relatively more on funeral expenses than health expenditures than the rich is also an indictment of the health service quality and access offered to the poor in Ethiopia. It suggests a lower income elasticity for funeral spending than for health spending, which implies that funerals are considered more of a necessity than health spending by households. When incomes fall, they will cut back more on health than on funerals: they consider it better to spend money on burying people than trying to cure them.

[17] This does not contradict that these institutions are responses to market failures. Effectively, they are non-market institutions taking on functions that a perfectly working insurance market could perform. But the specific form these institutions take on is still conditioned by the local context.

[18] It was striking that no specific literature dealing with these institutions and their possible precursors in more traditional Haya society in Tanzania could be traced.

cultural requirements for burial and some rules of conduct regarding the way co-operation and mutual support is required for funerals. However, the specific way the iddir is organised suggests that it emerged in a context of monetisation and literacy, and probably closely linked to urbanisation — and the need to have clearer community links and obligations.[19] The available data suggests that it is an early 20th century institution, probably started by migrants and it was initially linked to the Gurage, an ethnic group with a history of migration and trading.[20] The number of iddirs increased significantly in the capital, Addis Ababa, during the Italian occupation (1936-40) and they started spreading from urban areas to rural areas thereafter.

There is also little evidence that there has been any outside influence, for example from similar institutions across Africa. If anything, it is likely that they emerged in parallel with similar organisations across Africa and elsewhere. There is also evidence of a complex relationship with the state. Until the 1960s, iddirs had been relatively invisible institutions. This changed when, in the 1960s, municipal authorities in Addis Ababa and, more generally, the Ministry of National Community Development sought to promote collaboration between iddirs and the government. At the same time, some politicians used these associations as platforms for political purposes. In this period, different iddirs became involved in broader development activities. An attempted coup in 1966, partly blamed on an indigenous migrant association, meant that the state tried to establish more control over these associations, including iddirs. The revolution of 1974 brought the Derg to power, after which the leadership of the iddir were considered reactionary elites and most iddirs retreated to focus only on burial activities, and the formerly strong urban associations were marginalised. Nevertheless, the spread throughout rural Ethiopia clearly continued, while the size of some urban based iddirs increased considerably.[21]

In recent years, the EPRDF government (which came to power after the fall of the Derg in 1991) has increased its interest in working with associations like the iddir. The Ministry of Health has expressed an interest in working with iddirs most notably in anti-HIV/AIDS campaigns, while there have been suggestions to involve organisations such as the iddirs in spreading modern agricultural activities. The government has also been interested in organising iddirs within towns into broader associations. In the same period, certain NGOs, notably ACORD, have started to work with iddirs, although this remains largely a limited number of instances or activities. Some iddirs have themselves also started to try to expand their activities. For example, 21 iddirs in the west of Addis Ababa

[19] Although this needs further analysis, it is striking that, in the villages covered by the ERHS, villages in less densely populated areas and with poorer infrastructure and market linkages, fewer iddirs were found. Furthermore, in one of the two Tigrayan villages where no iddir was found, villagers simply stated that this is something for town people and not needed in a (remote) village like theirs where everybody still interacted with everybody else.

[20] Pankhurst (2002) presents evidence that the first reported iddir was formed by a group of Soddo Gurage traders, and gained legitimacy via a government Minister of Emperor Menelik at the beginning of the 20th century.

[21] There are examples of large professional or work-based iddirs in urban areas. Note that the spread in urban areas is sufficiently large to imply that the vast majority of urban dwellers will be members of one or more iddirs, across social classes. Indeed, even the World Bank's country office has its own iddir.

have formed an umbrella association, strictly politically neutral but focusing on developmental activities.

The experience in Nyakotoke in Tanzania provides another interesting example of how these institutions evolve in response to changing political contexts. The village burial society, the Bujuni (meaning "mutual help" in Haya) is a relatively old indigenous institution. However, it only became more formalised after 1973, under the impulse of a migrant from another village, who had suggested making the rules and regulations more explicit. Some form of mutual cooperation existed similarly among women, but formalisation came much later. In 1973, as part of the radical changes instigated by President Nyerere's ruling party, women were forced to "unite" in formal groups as part of the UWT (the Swahili acronym for the Union of Tanzanian Women), organised in relatively large "village" level groups interpreted to include many communities beyond Nyakatoke, with pressure to set up village shops and other collective institutions via (forced) contributions. The village shop became bankrupt five years later and increasingly the UWT groups became just political institutions. However, after this experience, some 70 women decided to set up a group involved in economic activities to raise money for events such as funerals, births and hospitalisation, independently of the UWT and surviving its gradual disappearance. The group did not survive long and from 1984 factions broke away, and effectively these groups became the predecessors of the current groups, with a common element of providing insurance for funerals and hospitalisation. In 1994, the different women's groups (under the impulse of a recent migrant) formed the Muungano, the union of the women's group, integrating the basic minimum funeral and hospitalisation insurance. Since then, the different groups have experienced a relative degree of stability via the Muungano. Overall, the groups clearly conform to the idea of an indigenous association, even thought they were initially inspired by the formalised activities of the UWT. There is no evidence of any outside involvement in any of the current groups or their predecessors, and linked to the bad experiences in the UWT, they have stayed clear of any political capture even at the local level, steering away from the activities of the ruling party or the emerging opposition. The rules and regulations have clearly evolved over time, moving gradually further away from economic activities towards a clear focus on specific insurance.

6. The Challenge of HIV/AIDS

HIV/AIDS has been ravaging the study area near Lake Victoria in Tanzania for more than a decade while, in Ethiopia, the epidemic is currently expanding at an alarming rate. This section discusses the limited evidence available on the impact of the AIDS crisis on membership based indigenous insurance associations, particularly those concerned with funeral expenditure insurance.

A priori, HIV/AIDS has brought about a fundamental change in the risk environment faced by groups insuring funeral expenditures. These institutions had been developing in a context of gradually decreasing mortality figures in the decades up until the 1990s. The impact of HIV/AIDS has resulted not just in higher mortality, but has also brought about a fundamental change in the mortality risk distribution across the age and possibly even

the wealth distribution. The result is that the likelihood of the association being asked to contribute to the funeral of a member has increased, putting pressure on the finances and sustainability of these institutions. During interviews in the rural sample of iddirs in Ethiopia used in this paper, iddir leaders suggested that HIV/AIDS had only had a limited impact on societies so far. This is likely to be correct: in rural Ethiopia, the epidemic is only now beginning to spread and mortality rates have only just begun to increase. Consequently, iddirs have not yet had to change their rules. In any case, in recent years mortality figures in most parts of rural Ethiopia are more likely to have been more affected by the deaths of conscripts of the Ethio-Eritrean war of 1998-2000 and the drought in 2001/02. However, many had sufficient information on HIV/AIDS to report that premiums would have to increase in the future. In the particular study village in rural Kagera in Tanzania, similarly only limited impact of HIV/AIDS on groups providing funeral insurance was reported although generally the groups surveyed were well aware of the actual and potential problems involved. They also could report anecdotal evidence on changes in funeral societies' arrangements in some areas linked to HIV/AIDS, for example involving less expensive funerals.

The clearest evidence available on the impact of the crisis comes from Pankhurst and Mariam (2004), based on a survey in urban Addis Ababa on the impact of HIV/AIDS on the iddirs. They found that of 120 respondent iddirs, 93 per cent reported experiencing an increase in the number of deaths among their members in the last three years. The number of households receiving burial support in the past had been about 20 per group on average, but this average has now increased to about 31. The observed increase in mortality was largely confined to the age group of 15 to 35 years, consistent with the demographic predictions on the impact of HIV/AIDS. The iddirs also reported increases in bankruptcy of other iddirs due to increased mortality, while about a third of iddirs had already started to respond to the crisis by increasing contributions or finding alternative ways of increasing income, such as by renting out utensils. Another study (Tesfaye, 2002) found similar consequences and responses due to the crisis. This is also bound to put pressure on the poorer members of iddirs. On the basis of the in-depth study of three iddirs in Addis Ababa, Shewamoltot (2001) found substantial increases in regular contributions and suggested that some members had already withdrawn from the iddir due to the increased financial cost. Other iddirs tried to contain the crisis by only paying out half the usual benefit at the time of the death and the other half conditional on the continuing payment of the membership fee by the surviving family members. Finally, a striking consequence of the HIV/AIDS crisis on the iddirs is that all these studies report that many iddirs have taken the lead in HIV/AIDS education of their members — about half the iddirs interviewed in 2002 by Pankhurst and Mariam (2004) now provided such information.

This evidence clearly suggests that iddirs are likely to come under increasing pressure in the next few years making increased contributions inevitable. The result is likely to be a less inclusive institution, with the poor increasingly less able to contribute. The fact that iddirs are responding to the crisis in different ways is encouraging, and suggests that their survival in one form or another may well be possible. In any case, if their important function in the social fabric as a key social protection mechanism is to be maintained, it

may become even more important that policy measures are taken to strengthen these institutions.

7. Conclusion

A membership based indigenous insurance scheme is a locally initiated association of people, who have voluntarily entered into an explicit agreement to help each other in a well-defined way when well defined events occur. We call these organisations indigenous because they have grown from within the community. We call them membership based, because the group is completely owned and managed by its beneficiaries. They were not established, nor were they developed by anyone but their own members. They are voluntary because no one is under strict pressure to become a member of a particular group.

Historical analysis from some survey areas in Ethiopia and Tanzania has shown that these groups are not "traditional" — a term that would suggest that these institutions may have existed unchanged for centuries, whereas they are often relatively new creations and have certainly been evolving and changing.

Analysis from a survey of these associations, matched with household data on the members and the population at large has shown that these groups manage to insure a sizeable part of the expenditures attached to at least some shocks. The associations seem to be inclusive, in the sense that anyone who is willing to abide by their rules is able to join and, at least in the areas under study, these groups showed a high prevalence. In most communities we counted several such associations and most households were member of more than one group. When different groups offer different products this leads to the emergence of a localised insurance market and introduces an element of choice for the households. Unfortunately, despite these attractive characteristics, people are still found to be severely affected by different manifestations of risk.

Finally, we noted that Ethiopian funeral associations are likely to come under increasing pressure in the next few years if HIV/AIDS makes increased premiums necessary. The result is likely to be a less inclusive institution, with the poor increasingly less able to contribute. A similar story could not be confirmed for Tanzania.

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