The Implications of Private Safety Nets for Public Policy

Case Studies of Mozambique and Zimbabwe

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IMPLICATIONS OF PRIVATE SAFETY NETS FOR PUBLIC POLICY

Chapter I

Introduction

Most households would like to reduce the extent to which their consumption varies as a result of fluctuations in their income. This can be derived from simple assumptions in economic theory, and confirmed both with econometric studies and by participatory interactions with the poor. Governments respond to this desire by providing a range of programs aimed at reducing the vulnerability of poor households to these income fluctuations. However, the state is a comparatively recent player in the provision of social protection from shortfalls in household income. In the absence of state support, households developed a wide range of informal mechanisms to help them to cope with adverse circumstances.

Several recent papers (Morduch, 1999; Kozel and Parker, 1999; Besley, 1995; and Alderman and Paxson, 1994) have reviewed how well these informal safety nets have protected the poor from extreme fluctuations in consumption, who are excluded from such safety nets, and under what circumstances functioning systems break down. A related question is whether public programs complement informal programs or crowd them out, perhaps leaving some poor households even more vulnerable.

This paper reviews social protection policy in two African countries to highlight the interplay of private and public safety nets. A number of excellent recent empirical studies from Africa have contributed to what is known about how low-income households insure themselves against risk.¹ This study uses the insights from these studies as a framework within which to review social protection policies in Mozambique and Zimbabwe. The limitations of such a review are readily apparent. Despite the significant differences between the two countries in terms of their economic resources and physical and managerial infrastructure and despite the existence of a complementary study of Togo (Bendokat and Tovo, 1999), these case studies do not cover a wide enough range of institutions to permit easy generalization. Moreover, detailed primary data are necessary to study any one such institution in detail, whereas this review must integrate from a range of secondary sources. Nonetheless, this study adds to the perspective offered by the existing reviews and empirical studies by stressing the interplay between government and NGO programs on the one hand and the various informal insurance mechanisms on the other.

Before reviewing the programs in Mozambique and Zimbabwe, it is useful to discuss a few general observations from the literature on the mechanisms that household and communities use to smooth con-
It is hard to begin any such discussion without a brief taxonomy. Households can manage risk, that is, reduce the variability of their income, by a variety of practices that, on average, lower their income but also reduce fluctuations in their earnings. They can also cope with risk by a variety of measures that moderate the impact of any income losses on their consumption. The mechanisms to achieve this include both individual resources such as liquid savings and assets and group-based lending. In addition, households sometimes rely on reciprocal assistance and cash transfers. Other classifications indicate the difference between risk sharing over time (as in borrowing money to be repaid later) and across space (receiving transfers from other households including remittances from family members who have migrated elsewhere to find work). Another important distinction is between covariant risk (those shared by a community) and idiosyncratic risks (those experienced only by individual households). Finally, there is the distinction between stochastic risks -- such as drought -- which cannot be anticipated except in a probabilistic sense and those risks that can largely be anticipated such as old age and seasonal factors like rainfall. In addition, there is the risk of death, which is certain but which occurs at an uncertain time.

With a few noteworthy exceptions, most empirical studies have indicated that none of these mechanisms perfectly insures a household against shortfalls in its consumption. Nor is it clear that they should be expected to do so. The unit cost of many insurance instruments may increase as the level of protection increases, even to a point where it becomes completely unavailable. Households may shift from one means of consumption smoothing to another as the relative costs of each method change. Moreover, which method is chosen by a given household is affected by whether the mechanism is reversible or not (Corbett, 1988). Finally, as long as there are some costs to smoothing consumption, the optimal amount of fluctuation in consumption will not be zero.

Thus, although Rosenzweig (1988) found that transfers change in response to changes in household income, transfers only make up for 10 percent of household income lost as a result of shocks. Similarly, Fafchamps, Udry, and Czukas (1998) found that households in Burkina Faso sold cattle to buy grain during periods of drought but that these sales financed on average only 30 percent of the households' income shortfalls. This was measured during a period of repeated droughts. Evidence from Burkina Faso and elsewhere confirms the intuitive proposition that the degree and duration of economic stress affect a household’s ability to smooth its consumption; households that are able to maintain their consumption in the face of a single adverse shock may fail to do so following sequential shocks (Webb and Reardon, 1992 and Alderman, 1996). This is in keeping with the argument made by Deaton (1989) who noted that, in principle, most households can smooth their consumption with their savings. However, a large shock or a series of shocks may deplete the household’s entire stock of savings.

Another general observation on informal insurance is that it is generally more costly and less accessible to the poor than to other households. For example, the poor often have less access to credit, although group-based lending schemes may help some asset-poor households to overcome some of the obstacles that they face. Further, various forms of coinsurance based on reciprocity among households may break down in the face of a sufficiently large economic setback, which is exactly when it is most needed (Morduch, 1999). Even ways of savings are comparatively inaccessible to the poor. The costs of physical assets often have declining costs with the scale of purchase or --as in the case of livestock-- cannot be divided into small units for purchase by the poor. Indeed, some forms of investments-- such as irrigation, livestock, and schooling--both reduce risk and increase profits and thus do not require the household to endure income variability in order to raise its average earnings. Yet, the poor often cannot take full advantage of these possibilities (Dercon, 1998).

Another stylised fact about informal safety nets is that they are more useful in helping households to cope with idiosyncratic shocks than with covariant shocks. Drought, floods, or insect infestation can be localized, but when such conditions
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affect wide areas, community-based support systems are often overwhelmed. Although community is a fluid concept and involves kinship and other ties that go beyond the confines of the village or neighborhood (Grimard, 1997), the reciprocity and information flows that are key features of informal insurance systems do not generally extend over wide areas. Moreover, many shocks are not directly weather related, but reflect macroeconomic conditions, which put pervasive demands on informal systems.

Often rotating savings clubs (Roscas) are considered an informal insurance mechanism used by both urban and rural households. Prevalent throughout the world, such clubs differ in how flexible they can be in response to economic shocks. While some allow households to remove their funds earlier than scheduled in the rotation, based on mutual consent or on the basis of need determined through an auction, many schedule the order of access to funds by lottery. Such a schedule addresses the need for households to accumulate cash for predictable lump-sum expenditures (such as school fees) but does not serve an insurance function (Rutherford, 2000). One common feature of these clubs is that they have limited transaction costs. Another is that they tend to dismantle themselves at a predetermined time (often to convene again). Indeed, Rutherford (2000) argues that this self-liquidation keeps transaction costs low. However, it also implies that these clubs are vulnerable to long-term covariant shocks; during an economic downturn, fewer members with regular incomes to contribute are available in each successive period.

Also of interest are informal loans and opportunities for pawning (Rutherford, 2000). These tend to be more accessible in urban areas than in rural. Again, they are vulnerable to repeated or long-term economic stress, with their interest and default rates being higher in the case of covariant shocks than of idiosyncratic shocks. Moreover, while NGOs and governments seek to assist savings clubs, often trying to transform their short-term financial intermediation into longer-term development, they generally look upon the terms of lending in pawn shops and informal consumption credit as anathema. This deprives these institutions of sources of capital that benefit credit societies and similar (often rural) groups.

To summarize, reciprocal insurance and self-insurance through savings and the use of credit markets plays a measurable role in protecting households from swings in their consumption. Yet, these mechanisms often provide only modest support, especially for those groups who are excluded from full participation in social and economic interactions. Thus, governments can justify getting involved in helping households to smooth their consumption in the same way that they can justify introducing programs that seek to raise the welfare of the poor through the transfer of assets or income—-to alleviate and reduce poverty. Another justification is the possibility that reducing risk may promote economic growth. This may be the case if the poor under-invest in productive assets in order to keep their assets in liquid form, or in order to participate in activities that are less risky but also less productive (Binswanger and Rosenzweig, 1993), or if the obligations of community-based coinsurance discourage them from accumulating assets.

While government interventions to reduce risk may yield welfare gains, they may also crowd out private insurance initiatives. The fact that the introduction of public transfers leads to a reduction in private transfers has been documented in a number of different circumstances (Cox and Jimenez, 1998 and Jensen, 1999). This possibility is less likely when the motive for transfers is strategic such as to assure access to an inheritance (Lucas and Stark, 1985), but, in such case, the recipient of the transfer is not likely to be in need of public assistance. Moreover, the reduction in private transfers to a household in response to the household receiving a public transfer may lead to higher consumption in the donor household. If both households were in similar straitened economic circumstances the second round effects of a well-targeted program may also be well targeted.

Public programs may preempt private action in other manners as well. Restrictions on the movement of grain in times of drought, for example, not only can interfere with normal market channels and
price integration but may also inhibit the development of private coinsurance schemes. Similarly, regulations of credit markets may prevent contingency lending at the local level. It is also possible that short-term assistance programs may interfere with reciprocity within a community without providing a sustainable alternative. Finally, establishing a legal framework for economic transactions may clash with local customs and norms including those aimed at protecting widows and dependent children.

This paper examines this interplay between government programs and traditional coping strategies in Mozambique and Zimbabwe--two countries that differ appreciably from each other in terms of their level of infrastructure and the capacity of the government to deliver services. Yet the two countries do have some ecological and cultural characteristics in common. The countries chosen also share the need for selectivity since neither government can devote appreciable resources to social protection without compromising their macroeconomic stability or investments in human and physical capital.

To illustrate this point, consider a transfer program that allocates 1 percent of GNP to social protection, a figure that was estimated to bring all the 30.4 million poor people in Brazil in 1995 up to the level of the poverty line (World Bank, 1999b). If a similar share of GNP were to be transferred costlessly and equally to all individuals defined as falling below the poverty line in Zimbabwe (Zimbabwe, 1998a), then each poor person would receive $0.85 a month. Each poor person in Mozambique (Mozambique, 1998) would receive only $0.11 a month if a similar proportion of GNP was devoted to income transfers. In both cases, this would provide the recipient with an increase in income of less than 5 percent of the average consumption of the poor.  

The small amount of these transfers both in terms of their absolute value and of their share of household income reflects the low incomes in the countries in question as well as the fact that both countries use poverty lines that define the majority of the population as poor (75 percent in Zimbabwe and 69 percent in Mozambique). Using the same 1 percent of GNP but targeting the ultra-poor (47.2 percent and 37.8 percent of the population in Zimbabwe and Mozambique respectively) would provide a transfer of nearly 11 percent of the income of the poor in Zimbabwe but only 5 percent in Mozambique. To take this one step further, imagine a program in Mozambique on the scale of South Africa's old age pension, that is, one that transfers 1.5 percent of GNP to roughly 20 percent of households. In an economy as relatively well off as South Africa and with a skewed income distribution, this transfer increases the incomes of recipient households by 50 percent (Case and Deaton, 1998) while in Mozambique such a transfer would only add 15 percent to the incomes of its beneficiary households.

A final perspective on the limitations of social protection in the poorest countries of Africa comes from looking at the current cash transfer program in urban areas of Mozambique (Low, Garrett, and Ginja, 1998). This is the largest single social protection program run by the Mozambique government and one that, after some recent reforms, appears to be well targeted in the sense that comparatively few of the recipients are non-poor. Nevertheless, in 1998 it provided fewer than 40,000 households (1.4 percent of the poor in rural areas and 8 percent of the urban poor) with an average transfer per individual that was roughly 10 percent of the national poverty line (and a smaller share of the urban poverty line) at a cost of roughly 0.2 percent of GNP.

This and similar calculations indicate that direct government transfer programs are likely to have only a limited impact on poverty in the poorest African countries. The scale of poverty and the limited resources in these countries are such that targeted programs that distinguish the poor from the nearly poor using the indicators of assets or potential earning can only bring about modest changes in poverty rates. Therefore, it is useful to find out more about what private arrangements households are currently making to provide themselves with social protection. It is also helpful to explore the question of which of these methods could be provided largely by informal networks and NGOs if they were given technical assistance or seed money from the government and which methods would
require substantial support from the government to be effective and sustainable.

This paper explores both of these issues in the context of two African countries—Zimbabwe and Mozambique. Chapter II of the paper examines the existing formal and informal social safety nets in Zimbabwe, while Chapter III does the same for Mozambique. Chapter IV summarizes our conclusions.

Notes to Chapter I


2 The phrase "safety nets" often fails to draw a distinction between the insurance function of social assistance and the objectives of transferring resources to those households that are not anticipated to have the resources to support themselves in the future. Yet, the design of an insurance program should differ from one that purely transfers income.

3 A similar, more detailed illustration for Malawi can be found in World Bank, 1999a. The transfer in the illustration used here varies as a share of income for the poor depending on where they live, since both Zimbabwe and Mozambique have poverty lines that vary by locale. In nominal terms, the poverty lines used for different regions in Mozambique differ by as much as 250 percent. The estimates also require some creative interpolation of the World Tables (World Bank 1998a), including, in the absence of sufficient data, an assumption that the distribution of income in Mozambique is among the least skewed in the region.
Until recently Zimbabwe has been a moderately prosperous country by Sub-Saharan African standards, with an infrastructure that enables the delivery of health and other public services. Nevertheless, Zimbabwe's economy has marginalized many of the poor households who live in communal lands. The country's agricultural land is semi-arid, receiving only 650 millimeters of rain a year on average. However, this is highly variable; twice in this decade total annual rainfall has been below two-thirds of the long-term average. In recent years, Zimbabwe has also experienced widespread economic disruption due to a combination of factors including economic restructuring, the loss of tariff advantages in trade with South Africa, and high inflation and interest rates attributable to general macroeconomic mismanagement.

Thus, in addition to discussing private and public responses to droughts, this case study reviews those programs that were put in place as safety nets in the current economic crisis. Another pervasive type of economic shock is the AIDS epidemic, which is discussed in both the third subsection in this section (which deals with health shocks and death) and the fourth subsection (which deals with the economic consequences of family breakup).

Response to Droughts

Using a unique panel of households followed between 1983 and 1996, Kinsey, Burger, and Gunning (1998) provided a portrait of the strategies used by farmers resettled in three settlements in Zimbabwe to cope with droughts. The data cover the 1991-1992 drought - the worst on record - as well as the 1994-1995 drought. In keeping with what has been observed elsewhere in Africa, the respondents indicated that their main source of cash to buy the food that they would have normally produced themselves was through the sale of cattle. In both 1992 and 1996, 60 percent of the panel indicated that they sold cattle, accounting for nearly 40 percent of the cash that they used to purchase food. Somewhat less typical for the Africa region, the second most important source of cash was cash holdings or postal savings, with wage employment being the third most important means of financing food purchases.

The panel provided some indications that this particular sample of households was resilient even in the face of repeated droughts. First, the average value of livestock that they owned in 1994 was greater than in 1991, despite the high number of sales and of the even larger number of animals that were lost during the drought. Second, while the number of
households that reported having savings accounts dropped from 42 percent in 1992 to 27 percent the following year, it had recovered to 47 percent by 1994. These figures, however, are not necessarily representative of the wider population in Zimbabwe. Nor is the fact that cattle prices dropped only 10 percent below the 1983–1996 mean during the 1991–1992 drought necessarily typical of all communities. Nevertheless, the special circumstances still indicate the potential for households to accumulate assets even when their earnings are highly variable. Moreover, they confirm the important role played by private markets (for livestock) and by rural financial institutions in providing self-insurance.

The communities in the panel studied by Kinsey et al. (1998) also benefited from government drought relief programs. In three years during the period 1981–1995, over three-quarters of the sample reported receiving food aid or drought relief, with over 98 percent of the sample reporting that they received such aid following the 1991–1992 drought. Indeed, this may be partly why households were able to recover so rapidly after the rains returned. Nevertheless, many households receiving food aid in 1992 or 1993 also reported having to reduce the frequency of their meals and to rely on foraged foods, a common response to food shortages (Corbett, 1988 and Cavendish, 1997). Moreover, a further analysis of the panel data by Hoddinott and Kinsey (1998) unearthed another aspect of inadequate consumption smoothing. Hoddinott and Kinsey (1998) found that children who were in the most nutritionally vulnerable age bracket (12 to 24 months old) during the drought that was caused by the failure of the 1994–1995 rains were shorter than other children who were in this age bracket in years of normal rainfall. The ownership of liquid assets by a household was associated with more normal growth rates for children in the household in these years, whereas the household being a recipient of state assistance had no measurable impact on children’s growth rates. While the latter result may be due to limited variance—most of the households in the sample were recipients—the fact that the combination of savings, asset sales, and state support did not prevent stunting is puzzling.

This long-term nutritional consequence of the Zimbabwe drought is a bit of a surprise given that the sample studied by Hoddinott and Kinsey drew on their assets less than other communities to make up for agricultural shortfalls during the drought. For example, Cavendish (1999) indicated that the relatively isolated community that he studied lost 80 percent of their cattle between 1991 and 1993. While there was a partial recovery by 1997—the number cattle owned per household increased to half the pre-1991 level despite the occurrence of another drought—few households that had lost their entire stock were able to acquire cattle in this post-drought period. In part, this reflect the high price of cattle in the region due to the reduced stocks locally and to the community’s limited integration to the larger economy. Thus, the first drought left many households with reduced asset bases to serve as insurance against subsequent shocks as well as reduced draft power for agriculture.

The programs for drought relief examined in Hoddinott and Kinsey’s study are still at the core of the Government of Zimbabwe’s drought relief strategy. In 1992, the government offered a food for work scheme as well as supplementary feeding for children. A third of Kinsey, Burger, and Gunning’s sample participated in the food for work scheme and virtually the entire sample received food aid. By 1995 food for work was largely discontinued due to an insufficient number of suitable projects and the main vehicle for assistance in rural areas was a grain loan scheme, although with only 44,000 tons (plus cash worth roughly another 10,000 tons) actually repaid out of 376,000 tons loaned in 1995–1996 the program functioned largely as a grant.

The grain loan program assisted 6.4 million people in 1995–1996, a year that followed a harvest in communal areas that had been only one-third the average of the previous two years. The cost of this program, exclusive of donations from aid agencies, was 708 million Z$. The grain loan program assisted over 4.5 to 5 million people in 1998–1999, following a harvest that, while affected by erratic rain, was 75 percent larger than the 1995 harvest for the nation as a whole. Preliminary projections for 1999–2000 prepared in April 1999 were of a similar order.
of magnitude, in anticipation of a harvest that was expected to yield less than the level of annual national consumption because of flooding and pest infestation rather than drought.

Distribution of grain loans has been only a small share of the number of applications for aid received by the government. According to the Herald newspaper (April 13, 1999), over 12 million applications for grain loans and another 1 million for free food were received—out of a population of 12.5 million. The issue of possible wholesale fraud is a different concern than incentives for individual dependence but nevertheless, this is an indication of a serious management problem. Indeed, this may have proven to be a fatal flaw in the program. In late April 1999, the government suspended the program, and no clear successor program has been announced as of October 1999. After the program was suspended, the estimate of grain production in communal areas was revised upwards by 400,000 tons.

The Ministry of Public Service, Labour and Social Welfare (MPSLSW) has also provided grants of food, with no pretense that they are loans, to individuals who are deemed to be unable to meet their food needs. This includes the elderly and the chronically ill. This is not strictly a drought program—it reached 336,000 individuals in 1997 following an ample harvest. However, this was half the number of recipients in the year following the 1995 crop failure. Similarly, the concurrent supplementary feeding program—originally run by the Ministry of Health and now largely run by NGOs—scales up or down depending on harvests (and donor funding) but operates every year in some of the poorer districts.

Thus, the government and donors have attempted to address the covariant risk of drought and locally chronic food shortages as well as some idiosyncratic risks stemming from the inability to earn enough to purchase an adequate amount of food as part of the set of programs covered under drought and food security assistance. These programs nominally involve the local community structures. For example, village leaders are involved with drafting the lists of individuals who are eligible for free food and in forming loan groups for participation in the grain loan program. Also, the supplementary feeding program relies heavily on community participation. This participation as well as caregivers' willingness to bring children to the daily meal can be considered a self-screening mechanism and has been observed to decline when enough locally grown food is available. However, this community participation differs from key informal safety nets, as there is no reciprocity and no explicit hard budget constraint at the community level.

Given the scale of these programs, the limited amount of administrative screening involved, and the absence of any incentive for self-selection (as would be the case in a true loan program or in a public works program), the government's drought policy runs a high risk of crowding out informal insurance. In recognition of this and of the pressure on the public budget, the government has tried to revive a traditional system of support called Zunde ra Mambo (ZR). The name means "chief's field" in Shona (the phrase in Ndebele is Isiphala se Nkosi) denoting land devoted to producing crops for a communal reserve. However, the ZR is currently run at the village level rather than at the higher level of a chief's administration. In some communities, the ZR collects grain for storage or even for cash from residents. In others, it modifies a tradition of communal time-sharing (chisi) to mobilize labor to cultivate designated fields.

The revival of some of the powers and responsibilities of traditional local leaders and chiefs has created some tensions with both the centralization of authority that has until recently been a hallmark of Zimbabwe politics and with the nascent trend to decentralize authority to elected village development committees. A related issue is that a number of areas—resettlement communities, commercial farms, and urban areas—have no traditional structures to build upon. In any case, the government's role in this revival is mainly as a motivator; little direct financial assistance is available, although communities in districts that participate in the Community Action Program can propose projects to create storage capacity.

There is currently little information on the performance of the ZR. However, given the extent of government and NGO drought relief programs, it
is likely that the availability of external resources would discourage households from turning to the ZR when faced with a covariant shock. However, the ZR may assist households to pool their resources to deal with idiosyncratic shocks. Even in such cases, the program must rely on community solidarity since the chiefs do not have the ability to directly tax the community.

Existing empirical studies of the degree to which public programs crowd out private safety nets have generally shown that there is a modest overlap between the two kinds of provision. However, these studies focused only on static crowding out. There may be as much or more crowding out in a dynamic context by which government policy influences the nature of investments by individuals or communities. For example, government drought policy may indirectly affect risk management strategies in that they may discourage the planting of drought-resistant crops. While sorghum and millet are adapted to low rainfall and can also be stored for longer periods than maize, the acreage devoted to these crops has stagnated in the last three decades while smallholder plantings of maize have roughly tripled. However, it is difficult to determine whether the decline of the relative share of planting of drought-resistant crops is due to a shift in the relative profitability of maize (reflecting both yield increases and marketing reforms) or the availability of low-cost (to the farmer) - risk-coping mechanisms. If the latter is the case, then, to the degree that the government's drought policy led to an increase in expected earnings, these policies have served the function expected of insurance programs, albeit using a fairly blunt and expensive means of providing that insurance.

It is also possible that, by providing insurance that attempts to fill the gap between a rural household's production and its annual grain consumption, the gain loan or free food programs discourage private and public investment in non-grain rural enterprise. Some regions of Zimbabwe are not likely to be self-sufficient in grain but can be self-reliant in the sense of being able to purchase grain grown elsewhere (domestically or in neighboring countries) with the proceeds of regular (as opposed to crisis-induced) livestock sales or with remittances and wages. Current calculations of the requirements for grain loans or free food do not take such potential in consideration.

Moreover, the government's drought policies may discourage private (and communal) investment in storage. While many of the trade restrictions that hindered private trade have been removed in the last decade, these reforms have been designed more to promote spatial than temporal arbitrage. One unintended consequence of this can be found in the market for maize meal. When the Government of Zimbabwe removed subsidies on roller maize meal in 1993, it also liberalized private milling and trade. The net result was that the cost of meal for poor consumers was lowered since these consumers were able to switch to cheaper hammer-milled meal (Jayne and Jones, 1997). However, since smaller mills do not store grain, this type of meal becomes scarcer as more time goes by since the harvest and as the amount of domestic production goes down. Thus, the weighted average cost of meal (from both roller and hammer mills) is more volatile than the cost of grain itself.

This is not due to a stated policy--in principle, hammer mills and small private traders can draw from the stocks and imports of the Grain Marketing Board. Nevertheless, a combination of scale economies in the transport sector and administrative sluggishness puts a de facto restriction on access to these stocks. This reduces the opportunity that households have to cope with higher prices by shifting to cheaper maize meal. Given that the government will be importing grain again in the 1999-2000 crop year, debate about the government's policy of releasing grain to roller mills will again be embedded in the larger issues of grain pricing and distribution.

Coping with Economic Stagnation

Zimbabwe introduced a number of reforms in the 1990s aimed at restructuring the economy. These reforms liberalized external and internal trade and reformed or divested many parastatals. Aware that similar efforts in other countries led to substantial economic hardship for at least a portion of the popu-
lation, the government took concurrent measures to mitigate the negative impact of these reforms. However, while the reforms achieved a fair share of their objectives, they did not lead to macroeconomic stability; massive deficits in 1997 and 1998 led to a major devaluation and cascading domestic debt with substantial consequences for economic growth and inflation. This contributed to a large covariant economic shock that was only tangentially due to structural adjustment, yet which relied on safety net programs designed to address a far less pervasive loss of purchasing power.

While rural households are frequently affected when devaluation raises the price of grain relative to wages (which is detrimental if the households are net purchasers of grain), many of the households that have been negatively affected by recent economic conditions are urban. Less is known in general about how urban households respond to economic shocks than about rural households; informal networks may be less stable and less reciprocal in urban areas than in rural areas. However, Cox and Jimenez (1998) indicated that remittances to some low-income urban communities increase as unemployment and income instability increase. Plausibly, such remittances constitute a similar safety net in Zimbabwe; it is likely that rural households regularly supply their urban relatives with grain (Mutangadura and Makaudze, 1999). However, no direct evidence on the dynamic nature of transfers (which would be necessary to distinguish coinsurance from a long-term transfer of income, say, between generations or migrant members of households) is documented in the available data. However, the 1995-1996 Household Income Consumption and Expenditure Survey does indicate that transfers, including gifts in kind, play a substantial role in boosting household income. The survey indicated that households in the poorest four deciles in terms of expenditure per capita received gifts and private transfers worth over 20 percent of total expenditures. Two-thirds of the entire population received some private transfers during the survey period.

This ratio of transfers to total expenditures declines slowly as income rises. Indeed, the absolute value of transfers received rises as household expenditures rise. However, if one looks at net transfers after subtracting gifts given, one still sees that net transfers for the first three deciles amounted to 20 percent of their expenditures, but after that, the share declines rapidly. Although the richest two deciles received far more per capita than poorer groups, they also transferred more to others. For these groups, net transfers were negative.

Remittances appear to play a different role in rural communities than in urban ones. The average rural resident receives a net transfer into his or her household. This was confirmed by Cavendish (1999) who also showed that remittances increased between 1991 and 1997 in the rural community that he studied, which was supported by remittances from agricultural labor. In contrast to the pattern in rural areas, the Income and Consumption Survey showed that the flow of transfers for an average urban household was outward. Moreover, while households in the third decile in urban areas did receive a net transfer that amounted to 9 percent of total expenditures, on average, the two poorer deciles received negligible amounts relative to their expenditures. Thus, while it is difficult to extrapolate from the available cross-sectional evidence to a situation of transitory shocks, it is unlikely that the urban poor rely on private transfers in time of economic downturn to the degree that rural households benefit from such transfers. Another way in which households sometimes deal with economic crises that has been reported in the literature is by withdrawing their children from school. The Sentinel Surveys that monitor the social dimensions of adjustment have yielded some evidence for this. In those surveys, the share of children who reported that the cost of schooling was the reason why they were not attending school rose from 33 percent in 1992 to 48 percent in 1996 (Zimbabwe MPSLSW, various years). However, this should be viewed with some caution since the Sentinel Surveys did not record a decline in enrollment rates during this period. Other sources of data on enrollment are similarly ambiguous. For example, while primary enrollments as reported in national statistics did decline 3 percent from 1997 to 1998,
an analysis of household survey data from 1990 and 1996 showed that enrollment in primary education increased despite a clear reduction in overall income (Alwang and Ersado, 2000). Moreover, although secondary school enrollments did decline in the same period, the decline was no higher for poor households than for other households, suggesting that the decline might be due to other causes rather than households not being able to afford school fees.

The government explicitly addressed the possibility that economic hardship may affect school enrollment by introducing the Social Development Fund in 1991. This fund has an employment and training component as well as a social safety net function. The safety net offers means-tested assistance with school tuition and exam fees as well as with fees at health centers (it also initially included a free food program to offset the impact of the removal of maize subsidies). Since there are no fees for service in rural health centers and no tuition is charged in rural primary schools, the safety net is largely an urban program. The program explicitly targets the families of retrenched workers, though any family with an income below Z$400 a month was eligible in 1998 in principle. However, the program is beset with problems, including an inefficient screening mechanism and chronic underfunding (Kaseke, Dhemba, and Gumbo, 1997). The funding for 1997-1998, for example, was less than 10 percent of the non-salary budget of the MPSLSW, while the grain loan and free food programs are expected to comprise around two-thirds of these expenditures for the same year. There are no data that permit analysts to distinguish between the different effects of the program, particularly between those that substitute for private savings or transfers and those that increase demand for health and education. If demand for these services increases, then the safety net may encourage rather than crowd out private sources of income support in the sense that the availability of support for tuition prompts households to keep their children in school, meaning that they will either use their private savings or need increased remittances or both in order to fund the remaining costs of their children's education.

Health Shocks

To a significant degree, a health shock affects a family in the same way as a loss of employment. In many situations, the cost to a household of treating an illness or injury is significantly less than the income lost as a result of the illness (Gertler and Guber, 1997). Only a small share of employees has some degree of formal insurance both for unemployment and retrenchment and for health shocks (including medical leave). However, with the possible exception of AIDS, the impact of health on employment is only weakly correlated across an entire community and, thus, is the type of shock that may be assisted with family and other support networks.

Even in the case of AIDS, which typically requires more care and involves more expense than many other adult illnesses, community support networks have provided assistance to affected households. In Zambia, for example, community-based care has been initiated in Malawi. This type of care may also diminish the stigma of the disease and, if so, may contribute to the open flow of accurate information that is necessary to limit its spread. Current global evidence (summarized in World Bank, 1998b, Chapter 4) also indicates that a range of informal networks provide remittances to families that have members who are ill and often send someone to live with that family to help with generating income as well as with in-migration to assist with labor. Families may also assist by providing fosterage to children. In general, such private remittances exceed the amount of support provided by the government and NGOs by a substantial amount.

This support—and the change in the composition of the household—often continues after a death. Indeed, the evidence from panel data in Tanzania and Cote d'Ivoire shows that households tend to be fairly resilient in the face of the loss of an adult; although total household expenditures decline immediately after the loss of an adult member, they then partially recover. Such studies indicate that, in the longer-term, the death of an adult appears mainly
to affect the household's investment in education and in child nutrition. This may be due to the reallocation of chores as well as to changes in parental care (and possibly the unrecorded transmission of AIDS to the children).

Such panel studies are difficult to conduct, and there is no direct evidence of this kind from Zimbabwe. Indeed, what evidence there is, based on Demographic and Health Survey (DHS) cross-sectional evidence, indicates that Zimbabwe is an exception to the general pattern of lower school enrollments for orphans (World Bank, 1998b, Figure 4.13). However, the difficulty in extrapolating from the existing global evidence comes less from the variations between countries than from the fact that the problem is accelerating with the possibility that households may change from one coping mechanisms to another as the scale of the problem increases. For example, traditional sources of support to invalids and to families that have lost adults may become overstretched as the AIDS pandemic claims the siblings and cousins of the original victims. Indeed, the traditional practice in many African societies of a man marrying his brother's widow, which provides the widow and her children with a form of insurance in the case of accidents and other forms of adult mortality, may be responsible for the transmission of AIDS. It is too soon to know how effective alternative structures will be if this practice wanes.7

Burial societies also serve as insurance in that they spare the relatives of someone who dies the substantial burden of funeral expenses - which often exceed the costs of medical care prior to death even in the case of protracted illness. Such burial societies arose in Zimbabwe out of a need for transport in communities of migrants and mine workers. However, they are now widespread in the country, covering as many as 80 percent of residents in some urban neighborhoods, including individuals who are also covered by formal sector funeral insurance.8

There are societies, in effect, subsidize the families of individuals who die young since these individuals make fewer payments than the average participant does. Rutherford (1998) indicated that often such societies are based on an annual payment that is partially refunded if total contributions to the society exceed outlays in a given period. Such societies may come under pressure as the probability of adult deaths increases in those places where AIDS is widespread. However, in Zimbabwe, it is more common for members to make a monthly subscription. In such a case, the subscription can be increased if reserves get low. Similarly, new members are often asked to pay an entry fee based on the accumulated reserves of the society. This somewhat offsets the risk of adverse selection.

**Widowhood and Family Break-Up**

A death in a family generally causes the personal and financial bonds within the household to change. Many of the issues involved in this rearrangement of financial bonds within a household overlap with the issues involved in traditional insurance. However, many reciprocal relations in co-insurance are not enforceable under law - indeed, a key question in understanding these structures is how they function in the absence of mutual binding agreements. In contrast, rights of inheritance are covered by the law. In fact, they are often covered by more than one legal system. In Zimbabwe, rights of inheritance differ whether a marriage is civil or customary and, if the latter, whether it is registered or not. Moreover, even if the marriage is not registered, certain rights are, in principle, guaranteed under legislation that was enacted to ensure that the family of the deceased receives basic maintenance from the estate (Stewart and Ncube, 1992 and Gopal and Salim, 1998).

Customary law in most of Zimbabwe allows for rights to the property of a deceased individual to pass to his brothers and male descendants. However, in principle, traditional law also allows widows to use their deceased husbands' property and land for a year, after which the widow makes the decision whether to remain with her deceased husband's family with the right to continue using his property or to return to her birth family (Stewart and Ncube, 1992, emphasis added).

How free the widow's choice is in practice is a matter of interpretation. The widow's access to
property is couched in terms of the use of the lineage's--not her own--resources. Her rights are not transferable nor does the family responsibility for her or her children's maintenance remain unaltered should she move to an urban area. Moreover, if she seeks to marry again outside her first husband's, this was often construed as leading to the erosion of the family's resource base through her expenditures on her new husband or his children (Zimbabwe, 1995) and may be cause for her to be expelled from the kraal. In other instances, a widow's refusal to accept her dead husband's family's choice of a new marriage partner for her could be construed as a breach of her original marriage contract. In such circumstances, the woman and her natal family may be required to return the bride wealth that was given her at marriage (Holleman, 1975).

The tradition in which a dead man's family takes responsibility for his widow provides her with some guarantee of support. However, where land is the main basis of livelihood, it also leaves the widow in a dependent state. The extensive social and economic consequences of such relations are not confined to issues of inheritance and have been extensively commented upon in the literature. While many of these issues are beyond the scope of this paper, what is germane to the topic is the question of whether the traditional or informal safety net for widows, even if it is functioning as intended, serves the wider social goals of equity and economic development. Moreover, in common with the other forms of informal insurance discussed in this paper, it is important to consider under what conditions the traditional system fails to function as intended and what fallback or recourse is needed when those conditions exist. Finally, any attempt to expand the coverage of the law must take into account whether this will risk undermining local norms at a rate faster than the judicial and regulatory system can be expanded to fill the gap.

One issue for consideration is the fact that, as with any system, some individuals may not honor the obligations that offset their property rights under the traditional systems of inheritance. One check against the grabbing of assets and against the involuntary expulsion of a widow from her husband's land or house is the recognition that what one does to one's brother's widow may be done to one's own (Ncube and Stewart, 1997). However, this clearly is less direct than the incentives to honor obligations that are inherent in the repeated interactions of co-insurance.

Also, the nature of the inheritance structure creates asymmetric economic incentives for wives and husbands. According to Ncube et al (1997), one prevalent view of the underlying tenet of this traditional law is that a married woman works for her husband. Under this view, property acquired during a marriage generally becomes the property of her husband, just as property acquired through the efforts of an employee becomes the property of the employer. Thus, to the degree that this prevails, traditional inheritance practices are a disincentive for women to accumulate assets just as in other circumstances inheritance and residency practices may be disincentive for households to invest in educating their female members.

Arguably, departures from the protection afforded by traditional inheritance or the issue of incentives in that system are of declining importance. The Law of Succession was amended in 1997 to make surviving spouses the major beneficiary of an estate and to guarantee that the matrimonial home remains with the survivor or survivors (Gopal and Salim, 1998). It remains to be seen, however, how the law is interpreted and enforced. Indeed, the Supreme Court ruled in April 1999 (in Magaya versus Magaya) that the Legal Age of Majority Act of 1982 does not apply to customary law and that under customary law only men can inherit. While this ruling does not directly affect the Law of Succession, it implies that the Supreme Court may be willing to erode the legal gains made by women in recent years.

A number of NGOs have been active in challenging the earlier laws governing succession and maintenance and are undoubtedly going to press the Supreme Court to review its concept of the immutability of customary law. Presuming that the current legal framework guarantees rights to property for women (such rights have not been challenged if they are under civil law), these NGOs also will continue to provide resources to enable women
to seek redress when they are denied their rights. We will return to the question of access to the law in the concluding section of this paper.

As with the norms regarding the maintenance of widows, all societies have norms that guarantee that minors who are orphaned are provided for. However, there are some signs that these are being strained under the onslaught of the AIDS epidemic. It is estimated that 30 percent of children under 15 may be orphaned by 2010 (Foster, 1998). Estimates put the current number of maternal orphans in the country at 600,000 (and more than twice that for all orphans - UNICEF, 1998), out of which only about 3,000 are in institutions. At the current time, as many of half of all orphans are cared for by a grandparent, with a number of these households becoming children-headed households after the death of the grandparent (Foster, 1998). While the precision of such estimates can be questioned, the implications are obvious for any traditional system that evolved under vastly different conditions.

The different conditions are partially a matter of sheer numbers but also an issue of the correlation of AIDS across family members. The particular circumstances of paternal orphans are directly tied to the widows' rights that were discussed above. They differ in the case of AIDS orphans mainly in the degree to which the widow's chances of remarrying are limited by the decimation of the male population by AIDS as well as to the degree that practices that lead to AIDS are more similar among brothers than among other males in the same age cohort. Maternal orphans are traditionally looked after by the new wives of their father, who frequently comes from the same family as the deceased woman. However, such a remarriage may be affected if the previous wife was a victim of AIDS and the surviving husbands has, or is assumed to have, AIDS himself. However, the main difference between orphan due to AIDS and the more general risk of parental death is an increased probability of children with neither a surviving mother nor father or whose surviving parent is too ill to look after a child.

While such children are still largely looked after by their parents' relatives, often the principal caregiver is elderly. Moreover, given the early age of childbearing in Africa, it will only be a relatively short time before AIDS-related "grand orphans" (children whose grandparents died comparatively young) become a noticeable share of the overall population of orphans. There is also anecdotal evidence that the number of street children is increasing as is the number of child-headed households. To address the strain on traditional sources of care for orphans, the MPSLSW has recently drafted a policy for orphans that will include grants for Grandparents and for community services. However, the scale of the initial proposals clearly assumes that brothers and others of the parents' age cohort are generally in a position to support orphans. There is some concern that any increase in government provision of maintenance grants for orphans will crowd out this source of support from the orphan's family. As with drought relief, the Department of Welfare also expects that the expanded ZR will assist communities in providing support to orphans, encouraged, in part, by the examples of a few pilot projects. Similarly, a few NGOs and community-based organizations have explored community-based orphan care on a small scale that relies on local volunteers who are often trained through projects and are linked to the Zimbabwe AIDS Network (UNICEF, 1998). Plausibly, one such private source of support that is provided to orphans of farm laborers will be eroded by the current unrest in commercial farm communities in Zimbabwe over land reform.

Divorce has some features in common with other idiosyncratic shocks discussed in this section. Like widowhood, divorce (or abandonment) irrevocably changes the economic and social relations of a woman's life and, as in the case of inheritance, the degree to which a woman's economic rights are protected is influenced by the form of her marriage as well as by society's views of her economic contribution. However, the rights of women in the event of divorce are far less certain than in the case of widowhood. Moreover, given the additional elements of blame and of competition involved in divorce, the transfer of rights is far more complex than in inheritance.

The economic basis of the property rights of a woman in divorce may involve one or more of
the following criteria: (i) her role as the guardian of minors; (ii) the property that she brought into the marriage; (iii) a share of the property accumulated during the marriage; (iv) her legitimate expectations in marriage, often based on the family's standard of living while the family was intact; and (v) the opportunity costs to her of devoting her time to her marriage obligations, when, for example, a woman gives up a career.

With the Law of Maintenance possibly still valid even for customary marriages in Zimbabwe, the first of these criteria may be relevant in both customary and civil law. Legal rights advocates have undertaken an educational campaign, that has largely been successful in spreading information about these rights. However, in customary practice, a woman's economic rights in divorce are largely determined by her fairly circumscribed rights of custody; in most cases, if lobola (a bride price) has been paid, children stay with their father's family rather than with their mother. Thus, many women have no traditional claim to resources under the first basis for property settlement outlined above. Juvenile courts can resolve disputes about custody and child maintenance including the logistics of how the woman can receive regular child support payments when her children's father does not have regular wages. Even when the father has made a payment to the court, a woman sometimes fails to take up the payment because she has not been informed the money is available or because she has no access to transport or time to queue.

The third criterion listed above (a share of the property accumulated during the marriage) is recognized under family law in Zimbabwe, but the right is not uniformly enforced by the judiciary. The problem stems in part from the fact that, in civil law, property in marriage is considered out of community (which implies that property is held individually) unless there is a specific agreement otherwise. In most cases, this discriminates against a woman's claim to property. The courts do, however, have the right to award a woman a share of property on the basis of her contribution to the household, and judges in urban areas sometimes uphold this right.

Customary law also recognizes women's rights under the second, third, and fourth criteria, although in many cases these are more limited than those recognized under civil law. There is both a policy issue about whether the differences between these legal systems are in keeping with the social and economic goals of the country and a practical issue of how the rights implicit under either kind of law can be protected in fact.

Notes to Chapter II

1 Kinsey, Burger, and Gunning (1998) discuss other studies from Zimbabwe that contrasted with their own findings. A number of other studies showed far fewer livestock sales; other found more reliance on private remittances.

2 Unless otherwise indicated, all data on program costs and number of recipients in this case study come from the MPSLSW. Annual costs and similar figures vary a bit from report to report even within the ministry. However, such differences do not affect the general picture.

3 As is often the case, the programs also have a mixed record of managerial and logistic capacity (Kaseke, Dhamba, and Gumbo, 1997). This influences both the targeting efficiency and the costs of operation, but these administrative problems reported are secondary to the policy concerns of sustainability and incentives covered in this case study.

4 Several caveats are important. A certain share of gifts reported are social functions that differ from either insurance of income support functions as commonly conceived although they represent part of the social fabric. Over two-thirds of the population reported receiving such gifts in kind or cash. While government transfers appear to have been small (received by 3 percent of the population and amounting to only 2 percent of the value of private gifts and transfers received), some government transfers in kind (for example, tuition support) may have been coded as private gifts in kind. The data imply a net inflow of funds. While this is possible if the family has migrant relatives living abroad, it is also consistent with the classification of some public transfers as private.

5 The outflows of transfers from urban communities in 1995-1996 may be a direct investment in
social capital that could be drawn upon in other years. However, this is more likely when an economic shock is confined to the urban area or when the shock is idiosyncratic.

6 The higher costs of AIDS were documented, for example, in rural Tanzania (World Bank, 1998b) and in Zimbabwe (Zimbabwe, 1998b).

7 In public meetings sponsored by the Masvingo Department of Social Welfare (Zimbabwe, 1995), a number of local leaders stressed that the responsibility for the care of widows does not necessarily involve conjugal rights. However, from the context of their comments, it appears that they were attempting to shift, rather than to reflect, prevailing norms.

8 Louis Masuko, personal communication. See also Mutangadura and Makaudze (1999).

9 This point is general. Browning (1994), for example, observed that differences in life expectancies and in the age at which people receive a pension leads to different preferences regarding the form of a pension.

10 UNICEF (1998) cites a study from Malawi that indicates that orphans in patrilineal kinship groups were more likely to be isolated from their mothers. The study also found that widows were often sent away and that land grabbing was more common in patrilineal groups than in matrilineal groups.

11 The probability that a man will leave behind one or more widows is quite different than the odds that a given woman will survive her spouse.
Chapter III

Social Safety Nets in Mozambique

Although it shares a common border with Zimbabwe, Mozambique differs appreciably from its neighbor in terms of its colonial and post-colonial history. Its liberation struggle was followed by a prolonged and devastating civil war. While the rate of economic growth since the end of this war has been impressive, the legacy of that conflict is profound. Not only were many of the health posts and schools destroyed in the war, the generation that should have benefited most from these services spent its childhood as refugees or, not infrequently, as conscripts. Another legacy of the war is the fact that, among the various idiosyncratic risks that confront the Mozambique people, is the pervasive risk of the estimated 2 million remaining landmines (Mozambique, 1998).

In addition to its general impact on the economy, Mozambique’s recent history affects the issues reviewed in this paper in four specific ways. First, the conflict disrupted the already rudimentary markets in the country. This has limited the extent to which trade and financial intermediation has been able to mitigate the impact of idiosyncratic and communal economic shocks. Second, much of the grain storage capacity of households and communities was either destroyed or allowed to deteriorate. This again, reduced communities’ ability to insure themselves against agricultural fluctuations. Third, many households lost their herds, which had served both as a productive assets and as a traditional means of savings against drought and old age. Finally, with a large share of the population having recently been refugees or migrants, traditional systems of co-insurance based on mutual knowledge and on repeated interactions may be under more stress than the degree of economic transformation in the countryside might otherwise imply. It is hard to make a full assessment of this final proposition. Although extensive data on vulnerability have been collected at the district level, any data on trends are either based on a short period or have gaping holes.

While this case study has much in common with the previous one on Zimbabwe, it concentrates on two specific types of shocks, natural disasters (drought or floods) and family break-up. The discussion of natural disasters also discusses some of the programs designed to respond to the wartime disruption, since any of the mechanisms to deal with drought - both informal and formal - owe much of their current form to strategies devised to deal with the dislocation of the civil war.
Response to Agricultural Risk

While Mozambique was seriously affected by the regional drought in 1992, there are several reasons why it is unlikely ever to suffer in the aggregate as greatly as Zimbabwe did in either 1991-1992 or 1994-1995. These include the fact that Mozambique has more and more regular rainfall in the central and northern part of the country and the fact that its resource base is more ecologically diversified. Moreover, crops such as millet and cassava, which are relatively drought resistant, make up a significant portion of the country's total production and reduce its aggregate vulnerability to shocks.

This said, the rural economy in Mozambique is characterized by regular localized drought, flood, and crop infestations and by subsistence-level standards of living in many rural households. Given the limited number of feeder roads into rural areas and the fact that there is little truck transport between the north and south of the country except via Malawi, the local variability of production is virtually synonymous with the local variability of supply. Prices vary greatly both over time and among different communities. For example, maize prices rose seasonally by 91 percent on average in the five months following the excellent 1996-1997 harvest (Mozambique, 1998). Moreover, in November 1997, maize prices in Maputo were virtually twice those in Nampula where there was a surplus. However, it is not necessarily the case that traders fail to respond to price differences. Traders currently export substantial quantities of maize from Mozambique to Malawi, and they handled food aid during the war, albeit with some direct subsidies (and local monopolies).

Farmers can deal with the seasonal rise in maize prices, to a degree, with a shift to cassava; there is some econometric evidence that this is what happens. Nevertheless, the seasonal price variability is consistent with the extensive evidence that a "hungry season" occurs between harvests. This, of course, is not strictly an issue of risk since the seasonal pattern is fairly predictable. Instead, it is evidence of chronic food insecurity, indicated in terms of the number of months per year that a household (or an average household in a district) has to rely on its own production of crops for its consumption.

This near-self-sufficiency in many rural communities is reminiscent of the conditions that prevailed prior to the civil war. During the war, however, many households were unable to plant or to store grain and fled to refugee camps or towns where food distribution centers were established. Food aid reached as high as 70 percent of total food production in the country. While the country no longer receives food aid from international donors, one legacy of the distribution of food aid is that the country has benefited from various systematic mapping exercises that recorded chronic food insecurity and risk of disaster at the district level. For example, the Ministry of Health has district profiles of nutrition that include rates of malnutrition and price trends as well as information on production systems and markets. While this information is useful for nutrition planning, it has also been analyzed along with extensive data from the World Food Program and the Famine Early Warning System in a vulnerability assessment (Mozambique, 1998). In addition, Medicins Sans Frontiers (MSF) collects price, production, and food stock data every month from 5,000 households to produce a bimonthly bulletin of food security at the district level. These bulletins alert the government and NGOs about local transitory shocks. For example, the bulletin for December 1998/January 1999 pointed out flood damage that was occurring in areas of just a few hundred hectares.

This illustrates the checks and balances that are possible when several repeated and overlapping data collections exist. Estimates reported in the Ministry of Commerce's Boletim Mensal de Comercio de Cereais (supported by the FAO) for the month of February 1999 indicates that 400,000 households were affected by floods. As indicated in contemporaneous MSF and WFP data, these households were mainly in the south and center of the country. This prompted a closer evaluation of the situation by the government and international NGOs. The March bulletin of the Ministry of Commerce reflected this re-evaluation, with the estimates
of food needs being drastically scaled back to a shortfall of two months for 25,000 families.

Several NGOs use these data either in planning the distribution of their direct assistance or in planning public works projects. Unlike in the food assistance program in rural Zimbabwe, it is assumed that it is normal in food-insecure areas like Gaza to depend on food from markets for three months and that, therefore, food-for-work programs need only fill that gap. Similarly, the agency responsible for disaster relief began its recent strategy review with a survey of the responses given by village residents to the question: What would you do in the event of flood if there were no one else beyond this community to provide assistance?

It is hard to assess the aggregate impact of such programs. Only 6 percent of respondents in a 1996-1997 household survey reported receiving direct assistance in terms of money, food, seeds, or clothing. However, most cluster-based sampling techniques are not designed to gather information on the type of local programs that the early warning systems often support. Moreover, many of these projects are funded by the WFP through food-for-work programs, which have been scaled up since the 1996-1997 survey was carried out.

In any case, neither NGOs nor the government are in a position to address idiosyncratic shocks or the full extent of chronic food insecurity. As in most of the rest of the world, rural households cope with risk in a variety of different ways including diversifying from agriculture into livestock (in the south of the country) and fishing as well as the use of wild foods. It is unlikely that many households have any savings to draw on or assets to sell in the face of a short-term shock after the decapitalization caused by the war.

Many of the food security profiles mentioned above also indicate that households increase their wage employment and migration in response to a food shortage. However, the empirical evidence on the scale of such activities is scanty. Indeed, given the scarcity of non-agricultural wage employment in rural areas where there are no donor-funded projects, it is difficult to see how they can increase their wage employment other than through migration. In the southern part of the country, people from Mozambique tend to migrate to South Africa. However, migration in northern areas is believed to be from Malawi into Mozambique. This reflects the relative land-labor ratios in the two countries and may be more of a long-term income-earning strategy by Malawians than a risk-reducing or risk-coping strategy per se.

Similarly, cross-border trade with Malawi is increasing, with food from Mozambique being traded for manufactured goods marketed through --but not necessarily produced in--Malawi (Whiteside, 1998). Local and central government officials in Mozambique are ambivalent about such trade, expressing concerns that national food security will be harmed, even if household incomes increase. Concerns are also voiced that farm households will be exploited or will sell all of their grain and not have enough left over for their own consumption during the lean season (Whiteside, 1998). Finally, the government is concerned that it will not be able to control or tax this trade. These concerns lead to a variety of barriers, some of which are ad hoc at the border crossings and some of which are in conflict with government policies expressed in Maputo.

If these barriers were reduced, the result should be similar to the type of long-term benefits that accrue from trade liberalization. Real incomes should rise on both sides of the border, and there should be less variation in food prices in southern Malawi. Whether such trade would also reduce risk in Mozambique is less clear. It is possible that at times food prices will be lower in Malawi, which will cause current trade flows to be reversed. However, there is little evidence on the covariance of production or prices in the border markets of both countries.

The use of wild foods - a common coping mechanism in many countries - has also been mentioned as a household coping strategy in Mozambique. This is actually one of a range of ways in which consumers respond to changing income and price signals, and governments have occasionally designed safety net programs with such self-selected consumption patterns in mind (Alderman and Lindert, 1998).

Evidence from the distribution and marketing of food aid in Mozambique during the early 1990s
illustrates the potential for using self-selection as an effective targeting mechanism for food subsidies. One study of the food aid program found that consumers who preferred to buy white maize rather than yellow maize when their prices were equal would have bought yellow maize if it had been cheaper than white despite their initial preference. (Tschirley, Donovan, and Weber, 1996). Specifically, Tschirley et al found that a discount of as little as 14 percent on yellow maize would have prompted a quarter of all consumers to shift their purchases from white maize to yellow, with low-income consumers being more willing than others to shift. There is similar evidence from Zimbabwe and Zambia (Tschirley, Donovan, and Weber, 1996 and Zimbabwe, 1994) regarding the willingness of consumers to purchase yellow maize under plausible price regimes.

While some of this evidence was obtained by presenting consumers with a hypothetical choice, yellow maize from both trade and aid in Mozambique averaged 348,000 tons a year between 1989-1990 and 1994-1995 (286,000 tons excluding the 1992-1993 drought year). In the comparable period, white maize production averaged 384,000 tons (or 434,000 tons when the drought year is excluded). This indicates that marketing channels were capable of handling a substantial volume of legal and quasi-legal trade from the ports to the interior of the country. There is some evidence also that the prices for yellow maize and for white maize were linked, although not during the drought period when the price of white maize, which was scarce due to the drought, rose substantially above the price of yellow maize (Tschirley, Donovan, and Weber, 1996).

Thus, this is an example of using self-targeting via the subsidy of yellow maize in a program of disaster management. It is less clear, given the data on consumer preferences, whether there is a potential niche market in Mozambique or elsewhere in Africa for private trade in yellow maize at non-subsidized c.i.f. prices. However, despite these indications that consumers may be willing to purchase yellow maize, policymakers in most countries believe that it would be politically costly for governments to distribute the commodity as part of a food aid program since it is regarded as mainly for animal feed. This perception has limited its use in programs designed for less extreme situations than the Mozambique example.

The same general point, that governments can use consumers' own preferences to target subsidies or tax exemptions could, in principle, be applied to other items that consumers buy. Indeed, the Government of Mozambique has recently chosen to exempt maize and bread from VAT, although, as in Zimbabwe, those consumers with higher incomes will receive higher implicit savings from the tax exemption in absolute value than those with lower incomes. However, the VAT exemption will be worth more as a share of income to low-income households relative to wealthier ones. Indeed, there is no one item that is consumed by all households in either Mozambique or Zimbabwe that would provide a vehicle for a progressive subsidy (or tax exemption).

**Widowhood and Family Break-up**

Unlike other Southern African countries, in Mozambique neither customary nor religious law is recognized by the state (WILSA, 1996). This implies that the majority of women in Mozambique have no legally protected rights of inheritance. In contrast, the law is quite inclusive with regard to children. By law, there are no illegitimate children in the country; regardless of the legal status of a marriage, any child that is registered has the same legal rights as any other child.

Two actions can be taken under the existing legal regime to protect the rights of women and children. First, simply registering children can establish their rights for child support. Second, since a marriage can be registered after the fact, a woman in a customary marriage has the opportunity to obtain the rights granted to a civil marriage, provided that her husband has not registered another marriage. Indeed, until recently the government was conducting a campaign to draw more families under the legal umbrella.

Similarly, the revised 1996 Land Law also enshrined women's rights to own and inherit title to land, in keeping with Articles 66 and 67 of the 1990
Constitution that recognized the equality of women and men. Thus, in principle, the revised Land Law has strengthened security of tenure for women (Devereux and Palmero, 1999).

However, the vast majority of individuals are unaware of their rights under family law (WILSA, 1996). Although NGOs provide some legal assistance, this tends to be mainly in the form of mediation in community disputes. Therefore, inheritance is still determined largely by customary norms.

The norms governing marriage (and hence widowhood) differ broadly between the southern and northern parts of the country. For example, the payment of a bride price (locally called lobolo) is more common in the south than in the north. Also, the north tends to be matrilineal while the south is patrilineal. This distinction generally affects where a widow (and her children) will live after the death of her husband and whether she is expected to marry her deceased husband's brother. It also influences the type of property that a woman will be allowed to own outright or the type that she will have the right to use. However, in practice, matrilineal societies in Mozambique do not necessarily afford more social protection to women than patrilineal communities (WILSA, 1996).

Traditionally, the payment of lobolo sealed a contract under which a woman's children were recognized as her husband's or—in the event of his death—her husband's brother's. In the former case, this contract gave the father custody of his children if a marriage breaks up, while in the latter case, it meant that the children's guardian was their uncle rather than their mother. The bride price compensated the wife's birth family for her lost labor and this resource frequently was used to help the bride's brothers to obtain wives. Also, under the norms of this community, widows seldom had the right to freely choose a new husband. Indeed, remarriage outside the family generally jeopardized her rights to the first husband's property, as most customary inheritance norms aim to keep assets within a family.

In the northern areas of Mozambique, women have greater rights to property in their own name than in the rest of the country. Moreover, there is a trend toward transferring property to women, including the rights to fields and the ownership of trees, by means of oral wills as well as by outright transfer during the husband's lifetime. Nonetheless, this is not automatic within local custom. The existing research into the rights of widows, however, consists mainly of case studies and is not sufficiently broad to allow us to make an assessment of the actual protection that such ownership affords. Nor are the case studies sufficiently unequivocal to indicate whether the disruptions of the war and the subsequent—albeit still limited—changing nature of markets are undermining the traditional obligations towards widows in either the north or the south. Moreover, according to Platteau and Baland (1998), traditional norms evolve when land becomes scarce. In such circumstances, there may be a growing tendency for families to restrict widows' rights of access to their dead husbands' property. The World Bank's 1996-1997 Poverty Assessment for Mozambique indicates that a quarter of all widows interviewed in a small and specialized survey of informal social networks had lost access to fields or houses or both after their husbands died (Dava, Low, and Matusse, 1998). However, it is not clear what the reasons were for these losses or whether this is a greater proportion than in the past.

In addition to relying on legal and customary inheritance and on kinship, single women utilize the support of other women, for example, in labor-sharing arrangements. In some contexts, these resemble Roscas both in the nature of the rotation of the work schedule and in the element of mutual support. The analogy can be carried further as the sharing of labor allows a woman who cannot command labor from within her household to carry out various tasks. Elderly women are less likely to participate in such exchanges since it is harder for them to make a contribution. However, in those places where AIDS has not devastated a generation, they are more likely to have children who can assist them on their farms. This mutual exchange of labor differs from those exchanges (such as ganho-ganho) which, although between neighbors, are exchanges of labor for food or cash and, thus, resemble a casual labor market.

While widowers also face economic stress due either to the loss of their wives' contribution to the
household or due to the costs involved in remarrying, there is comparatively little in the literature about any assistance provided to widowers by informal safety nets.

Participatory assessments have shown, however, that communities recognize that they have a responsibility for providing for the children of such widowers as well as orphans and disabled individuals. As in many countries in the region, the number of orphans is predicted to increase dramatically from the already high level of 10-12 percent of children under the age of 15 (UNICEF, 1999). The current base reflects the recent war; while the projections stem from the fact that Mozambique has not been able to avoid the AIDS epidemic. Given that labor is scarce in many rural areas of the country, it is common for childless families to take responsibility for double orphans, who may account for 10 percent of the current pool of orphans. Indeed, few problems were reported in the placement of the orphans caused by the civil war. However, there is some anecdotal evidence that child-headed households are appearing in urban areas. Thus, there is some early indications of a partial breakdown of traditional coping strategies.

The government has not earmarked appreciable funds for AIDS-related care, relying instead mainly on donor and NGO funding (UNICEF, 1999). As in Zimbabwe, the government of Mozambique sees community approaches as the key to its strategy for dealing with the needs of orphans. Indeed, while the government has not yet explicitly determined how it will foster community care (UNICEF, 1999), the Ministerio da Coordenacao de Accao Social has explicitly discouraged institutional care by either the government or NGOs.

In summary, the government's strategy for dealing with orphans is in keeping with its overall national approach to social protection. The Government of Mozambique explicitly recognizes the limited resources at its disposal for funding transfer programs and income support. Implicitly, it also recognizes the need to share the responsibility for risk management with NGOs and civil society. This approach is apparently based not only on a frank assessment of fiscal constraints but also a desire to avoid creating a culture of dependency on government programs. Thus, the Instituto Nacional de Accao Social's currently believes that an increased share of its expanding caseload can be supported through public works programs with direct transfers being limited largely to the elderly and the disabled. Similarly, the government's disaster relief policy is based on an assessment of the capacity of local communities to mitigate the impact of five categories of emergencies. Both components of this social protection strategy rely on extensive donor support and the assistance of NGOs to deliver services.

Notes to Chapter III

1 It is a surprisingly common error to assume that matrilineal societies are intrinsically less patriarchal than patrilineal communities.
2 This is called xivunga in Gaza and holominhana in Nampula.
Chapter IV

Conclusion

One major advantage of community-based social assistance and co-insurance is that it minimizes the problems of asymmetry of information and moral hazard that makes a formal system of insurance prohibitively expensive. Much of the literature on the decentralization of government services postulates similar advantages in terms of information flows and accountability (Oates, 1972 and Inman and Rubenfeld, 1997).

This implies that one way to capture some of the benefits of informal systems while tapping the state's ability to transfer resources over regions and over time is to use community structures as part of a decentralized program. The revitalization of the Zunde Ra Mambo in Zimbabwe has some of that flavor as—in a quite different context—has the involvement of councils of elders in Uzbekistan in distributing public social assistance (Coudouel, Marnie, and Micklewright, 1998). In these two examples, structures that predate the state's intervention are being used to distribute social assistance programs. Even structures set up by NGOs or the government for the express purpose of providing a service can benefit from having access to local information if they are decentralized. Social funds are one way in which the World Bank has encouraged the decentralization of service delivery. These, or similar structures, can also be used to provide social protection.

To be sure, such structures need local accountability and proper incentives—including a hard budget constraint—to reach their potential. In fact, the advantages of decentralizing social protection are less clear when a fully funded entitlement is being promoted than they are when a community is required to choose its priorities given a very limited budget. The former gives the community less incentive to use its information. Moreover, the mixed global evidence on decentralization and equity makes few generalizations valid and provides an argument for closely monitoring decentralized initiatives. However, the successful use of local participation in targeting drought relief in Zimbabwe (Kaseke, Dhamba, and Gumbo, 1997) and elsewhere (Sharp, 1997) hints that this may be possible.

However, one additional caveat is important. As Inman and Rubenfeld (1997) noted, decentralization may achieve efficiency but may not necessarily be the best system to guarantee rights defined in a constitution or national legal code. For example, given that reforms to the legal codes have recently expanded women's rights to inherit or be supported in a number of African countries compared to those
accorded to them by custom (Gopal and Salim, 1998), it is not clear that decentralization without countervailing checks would protect these rights.

If national policymakers aim to preserve informal social protection mechanisms, they must consider the sensitive issue of possible conflicts between rights and custom. This is made even more complex by the fact that customs are evolving in response to changing economic and social circumstances. Moreover, since colonial rule, local leaders have cited custom as a means of resisting any encroachment on their powers. Thus, custom can be a political tool as well as an expression of community values.

Practically speaking, one way for government policy to handle rights of inheritance and property settlement would be to encourage mediation in conflicts over rights of maintenance and succession. Moreover, since the central legal system can serve as a way to discourage the abuse of customary norms (Khadiagala, 1998), measures to increase access to the legal system are ultimately tools of social protection policy. That is, they may explicitly attempt to replace the autonomy of customary norms with mandated rights. If successful, timely legal support--either as a direct government program or through NGOs--may do more to avoid destitution than would the provision of cash transfers to widows and abandoned women. In addition to direct involvement in guaranteeing access to courts, governments and NGOs can enhance the rights of widows and separated women (as well as their children) by assisting them with the registration of marriages and of births where such registration is a prerequisite for someone to claim his or her legal rights.

Among other specific measures that take into account the interplay of private and public social protection, policymakers should consider the issue of child fostering. On average it costs 10 times as much to maintain a child in an orphanage as in a foster home (World Bank, 1998b). The expense of institutional care as well as its general detrimental consequences for a child's development are good arguments for the government to find ways to support families taking care of orphans. However, the government should aim to avoid crowding out private initiatives. Its challenge is to devise ways to bolster community programs without undermining the norms that have encouraged such fostering in the absence of state support. This may include increased community involvement in projects by providing co-funding and assisting with inputs to be used in community farming with land allocated by chiefs for the support of orphans. Alternatively, it may involve funding day care and feeding centers to reduce some of the burden on grandparents and other caregivers.

There is relevant experience in Sub-Saharan Africa--Malawi has taken the lead in promoting the community care of orphans--that points to both the potential and the limitations of such an approach for dealing with the consequences of the AIDS epidemic. It may be necessary to support the provision of psychological counseling--to community members overwhelmed by the task as well as to orphans--and technical assistance to encourage the development and expansion of community organizations. The aggregate burden of caring for dual orphans may not be large - all but the most pessimistic projections place this category as only a few percent of the age cohort--but the need to distribute this burden across a community will require innovation and local solutions.

There is substantial evidence that low-income households take advantage of market opportunities to mitigate fluctuations in their crop yields or in product prices. This case study has highlighted two examples of national policies that may restrict the ability of households to manage risk--the limiting of the access that hammer mills have to maize stocks in Zimbabwe and restrictions on cross-border trade in Mozambique. More generally, existing policies and institutions that relate to national or regional food self-sufficiency must be reviewed to ensure that they take into account household food security and risk management.

There is also evidence that low-income households in Africa use financial institutions as a means of coping with economic uncertainty. The promotion of such institutions both accelerates economic growth and helps households to manage their own risk. However, as is virtually always the case, there
is a caveat, which is that informal savings and credit institutions are designed to serve the needs of their clients. When these institutions are required to take development objectives into account, it is possible that they may become less flexible to meet households' savings requirements (Rutherford, 2000). In designing programs that aim to promote savings and credit mechanisms for low-income communities, policymakers need to be sensitive to the fact that multiple objectives should be carefully balanced.

Finally, there are a number of steps by which governments can help households to manage risk that are not generally considered to be social protection measures. Clearly, investments in roads and irrigation are in this category. It is rare that such investments achieve their objective of promoting growth promotion without also providing assistance to households in mitigating the effects of economic shocks. Therefore, if the designers of these investment programs explicitly take this dimension into consideration - especially when mobilizing community participation - this will enhance the risk reduction and growth impact of these interventions.
References


Whiteside, Martin. 1998. When the Whole is More than the Sum of its Parts. Cross-border Interactions on Livelihoods in Southern Malawi and Northern Mozambique. Report for Oxfam: UK
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