1. Introduction
Risk, as emphasised by the recent World Development Report (World Bank 2000) on poverty, is a fundamental cause of underdevelopment. Insurance makes it easier for people to tolerate risks, by replacing the uncertain prospect of large losses with the certainty of a small, regular payment. It thus reduces vulnerability, and thereby may stop markets from falling apart. Insurance is one of the basic institutions which can provide a defence against social and financial exclusion for people whose existing coping strategies are failing, and by protecting people’s livelihoods in this way, it should encourage investment among lower income groups. Nonetheless, as the recent World Development Report on poverty puts it: ‘there are almost no insurance markets in developing countries because of problems of contract enforcement and asymmetric information’ (World Bank 2000: 143). Slightly hyperbolic though this description of the situation is, there is no doubt that the provision of one of the potentially most poverty-reducing of all services is seriously deficient, especially at the bottom end of the market where risk-coping capacity is at its worst. Thus the spotlight is thrown on what the microfinance movement – so dynamic in other parts of the financial spectrum – is able to do to redeem this deficiency. This article examines what this contribution might be and how its effectiveness might be optimised.

Insurance everywhere is traded in a highly imperfect market. The research which has been done on microfinance customers’ expressed need for risk management and insurance services (Alderman and Paxson 1992; World Bank 2000: Chapter 8; Sebstad and Cohen 2001) suggests a substantial thwarted demand for insurance services, and considerable use of informal emergency loans, rotating savings and credit associations, and other insurance-substitutes, which probably increases in intensity as one moves down the income scale. One factor affecting variances in demand seems to be gender: as Elson argues (1999: 616): ‘in general, risk-reducing mechanisms have been much more a feature of male forms of market participation – such mechanisms include trade unions, job security rights, social insurance benefit, business and professional associations’.
Finally, it should be noted that much of the benefit from insurance – and therefore the demand for it – has an impact on people other than those who purchase the insurance. This is not only due to the reduction of the poverty and inequality which micro-insurance seeks to reduce. It is also because insurance can stabilise income and thus save financial institutions the costs of chasing unpaid loans; it protects human capital by enabling households hit by a shock to continue to make school fee payments and seek medical treatment for their families (see McCord 2000: 24); and it protects social capital by preventing groups, including families, from breaking up due to stress over unpaid debts.

There are previous examples of insurance schemes being delivered by external agencies in the past, often in the form of crop yield guarantee schemes for smallholders. The results have often been disastrous, which explains much of the scepticism currently expressed towards micro-insurance. The message from these studies is of course not that the demand for insurance is not there, but rather that the supply side needs reconfiguring. The lessons usually drawn (see World Bank 1989; Hazell et al 1986; Hazell 1992) have been that the supply should be of insurance against one insurable hazard only, such as death of the insured or burglary; that it should be protected against the moral hazard and adverse selection problems which render insurance so vulnerable to financial collapse, and which are discussed in more detail later in this article; and that the provision of insurance should move from the state to the private sector or an NGO.

What has actually emerged in developing countries after that first wave of failure, which it might be premature to call “the micro-insurance movement”, is something rather different from the neo-liberal minimalist affair foreseen by the World Bank and others. It has, essentially, three components, each of which springs from a distinctive historical root. The first is experimental schemes set up by NGOs or, uncommonly these days, the state, to insure against single perils, such as property, health and life insurance risks. The scheme operated by FINCA Uganda (Foundation for International Community Assistance), to be analysed below, is a good example of these. These attempt to draw on the lessons from the failure of multiple-risk schemes, and aim at least at financial sustainability over the medium term; often they are connected with micro-lending operations, and originate in “emergency fund” life insurance schemes which repay the outstanding balance of a loan in the event that the borrower dies. The second strand is profit-making schemes set up by the private sector, not specifically to cater for the bottom end of the market, but willing to offer small insurance contracts to low-income borrowers; these derive essentially from a movement downmarket by commercial insurance businesses observing the profits to be made out of microfinance.

The third strand, which overlaps with the first, is schemes operated by not-for-profit organisations which explicitly, on behalf of disadvantaged groups, insure a range of social functions, generally beginning with family health but often extending into a range of personal asset insurances. One of the oldest and most famous of these, SEWA (Self Employed Women’s Association) of north-western India, is also a registered trade union, and has aimed since the 1970s to provide “work and income security, food security and social security” (Sinha 2002: xi), and to supply many of the functions of social protection conventionally supplied by the welfare state in industrialised countries. As a women’s organisation, it addresses the asymmetry of risk between men and women. A similar gender focus characterises the Grameen Kalyan (Grameen Welfare) established in 1996 to handle the health insurance business of the Grameen Bank, arising from the realisation that ‘illness was the major reason for 44 per cent of our defaults’ (Daiyan 2001: 1). Other schemes of this type, such as BRACs (Bangladesh Rural Advancement Committee) rural health scheme, are less strongly focused on women clients, but share the same social objectives. The crux is, however, that at least in this third sector of micro-insurance, what we are seeing is an expansion into areas of social protection not covered by conventional loan-based microfinance (see Lund and Srinivas 2000). Indeed, rather than the private sector expanding at the expense of the public sector, the NGO sector is expanding at the expense of both. The overall social protection dimension of micro-insurance is covered in more detail in Chapter 8 of Mosley (2003).
<table>
<thead>
<tr>
<th>Table 1: Classification of micro-insurance organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong> Not-for-profit, single risk</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
</tr>
<tr>
<td>Grameen Life, Bangladesh</td>
</tr>
<tr>
<td>ASA, Bangladesh</td>
</tr>
<tr>
<td>BASIX Agricultural, India</td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Africa</strong></td>
</tr>
<tr>
<td>FINCA Health, Uganda</td>
</tr>
<tr>
<td>CERUDEB weather insurance, Uganda (in preparation)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>K-REP/Chogoria Hospital, Kenya</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Bima ya Afya, Tanzania</td>
</tr>
<tr>
<td><strong>Elsewhere</strong></td>
</tr>
</tbody>
</table>

Illustrations of the distribution of micro-insurance institutions by region and type are provided in Table 1. As discussed by Brown and Churchill (2000), progress during this second phase has been most marked in the fields of life, health and property insurance, with agriculture a long way down the list. This ordering, and in particular the salience of health, reflects the ordering put on specific risks, at least in urban areas, by the respondents to the 2000/01 World Development Report (World Bank 2000), but the current gap in insurance schemes to cover drought and flood risks is noteworthy.

The aim of this article is to examine how well, in the light of previous experience, the sector is reconciling the requirements of viability and poverty reduction, and where possible to make proposals for how this could be done better. Section 2 examines design issues at the level of which risks to cover, and then considers how the insurance premium should be set. In Section 3 the performance of some micro-insurance schemes to date are examined, and quantitative impact assessment results are presented for two cases. The concluding Section 4 presents some tentative policy recommendations.

**2. The design of micro-insurance: pricing, externality and incentives**

**2.1 Coverage and incentives**

In order to reconcile the objectives of viability and poverty reduction, the following hurdles have to be overcome:

- Moral hazard: the tendency for the existence of insurance to create perverse incentives to claim spuriously and behave carelessly, causing resource costs which may wipe out the benefits of insurance;

- Adverse selection: the tendency for the demand for insurance to concentrate among the worst risks;
Effective targeting: the possibility that poor clients may not opt for insurance; and

Administrative cost: the risk that the overcoming of all the above problems may bankrupt the insurer.

As mentioned earlier, the current generation of micro-insurance institutions has been engaged in a strenuous process of learning from the failures of previous insurance experiments in order to try to achieve some reasonably satisfactory solution to the problems mentioned above. The table in Appendix 1 aims to enumerate some of the solutions which have been adopted to these design problems by a group of six microfinance institutions in Africa and South Asia. Of the schemes described, four (Grameen, BRAC, SEWA and FINCA) fit within the “not-for-profit multiple risk” and two (BASIX and CERUDEB) fit within the “not-for-profit single risk” classification. We note, in particular, the following points of common experience:

- All of the schemes are typically confined to named insurable risks such as life, hospitalisation and drought – insurable in the sense that their likelihood of occurrence can be predicted within reasonable limits. The exception is BASIX’ agricultural insurance, which in the old Indian tradition guarantees a minimum return; but even here there are exclusions to defend against moral hazard.

- Premiums are set by these non-profit organisations in order to broadly cover costs, already marking a huge advance on the old generation of hugely loss-making insurance schemes. In addition, in the health schemes, the indemnity payout is limited by confining payments to a fixed sum, which can be visualised as the cost of the risk less an “excess” designed to discourage excessive or improper claims.

- Additional controls against fraud and moral hazard consist of ex-post checking of claims in the case of the medical schemes, and a payout based on rain deficiency, rather than on an insubstantial crop in the case of the planned CERUDEB agricultural insurance scheme. In the BASIX crop insurance scheme the payout is based on the deficiency in the value of the harvest, but is further based on evidence of good animal husbandry during the planting and growing season.

- Of the schemes mentioned, only FINCA Health employs an explicit defence against adverse selection, which is to require at least two-thirds of all group members to be members of the insurance scheme.

- None of the insurance schemes listed below is free-standing; all are layered on top of an existing microfinance operation. This has multiple implications:

  1. There is a cost saving on the administration and in particular the salesmanship of insurance, since the infrastructure with which to disseminate information about the scheme is already in position.

  2. Many clients only join insurance schemes because of their existing bond with the “parent” microfinance organisation (MFO). This often, sometimes in conjunction with an external shock (see below), acts as a recruiting device for a new and unfamiliar micro-insurance scheme which overcomes, for new members, the barriers of cost and unfamiliarity associated with membership. Often pre-existing groups of microfinance members have joined the scheme as a group. In this sense, social capital is an input into, as well as hopefully an output of, the micro-insurance scheme.

  3. Over and above the “social” benefits of a lower disaster risk for a given level of assets and income, the sponsoring MFO, in all of these cases, reaps the benefits of lower default rates.

- All of the schemes have negotiated re-insurance for themselves on local or international markets – somewhat in contradiction of Brown and Churchill’s claim that ‘reinsurance is largely unavailable for micro-insurers’ (2000: xiii).

- Explicit targeting of the poor, in the sense of concessional benefits for those below a certain income level, is practised only by the
Bangladesh institutions – Grameen and BRAC – each of whom offer lower premiums to the “ultra-poor”. The cost of this appears to be minor. It also seems to be that the fraud/moral hazard problem may be less with low-income customers, as there is some evidence from the trade that moral hazard risk declines with income. As the general manager of the COLUMNA insurance company in Guatemala put it, ‘Thinking about how to take advantage of an insurance policy seems to be something that declines with income and education’ (cited in Brown and Churchill 2000: 69). In other words, targeting poor clients often acts as a multiplier – as an additional defence against moral hazard.

2.2 Putting learning into practice

The question now for discussion is whether some further learning may be possible from the experience of these schemes, which may enable some diffusion of their benefits. This must be placed in context: micro-insurance is by no means the only instrument of poverty reduction or even of risk reduction – savings, for example, may provide better protection against common stresses; see Brown and Churchill’s observation (2000: xii).

Firstly and most fundamentally, how can micro-insurance be enabled to survive? The problem is that to survive it needs to break even, but breaking even requires very high premiums at the beginning of operations when potential customers are suspicious and unfamiliar with the concept; and so the infant micro-insurance institution can easily be caught up in a vicious circle of low demand, high costs and high premiums. It can be expected that the break-even premium will fall as the volume of business increases, with the spreading of set-up, administrative and promotion costs over a larger and larger number of accounts (Figure 1a); but of course it will never get a chance to fall if the market never gets the chance to expand.

In such a case, a subsidy may be needed, in the short term to move the insurer’s cost curve down to the point where he becomes viable, and over the longer term to give him time to move down the cost curve and build up a clientele. Luckily, such a subsidy can be justified from the external benefits conferred by insurance, and does not have to be justified on purely pragmatic grounds.

These external benefits are essentially of four kinds:

- Knowledge achieved by experimentation: By experimenting with different institutional designs, “pioneer” insurers create for their successors ideas and information concerning what will and will not work in a particular environment. This information is free to the successors, and thus confers an external benefit on them, but it can only exist if the pioneer is able to survive for long enough to develop and test the original design.

- Bonding social capital: An insured group of microfinance clients is less vulnerable than an uninsured group, providing that payouts happen reliably and on time. The variability of income within the group is in principle less and the likelihood that clients will be stopped from making loan instalments by a sudden negative shock is reduced, enabling trust between clients within groups – “bonding social capital” – to increase.

- Linking social capital: Evidence from BRAC suggests that the consumption of insurance, in combination with training, acts as an empowering mechanism, motivating clients to take a greater interest in the quality of the healthcare they are receiving and thereby improving it. The impact seems from interview data to be a combination of premium, training and group solidarity effects. However, the introduction of the insurance appears to trigger social capital between group members and health service provider – benefits for which the group members do not pay, so that they constitute an external benefit of the scheme.

- Externalities from greater stability of income: if, as a result of insurance, income becomes more stable within a particular village or community, this will give members of that community, including non-microfinance clients, greater certainty that their outstanding debts will be paid. This is because an unexpected crisis need no longer cause default if it is insured. This in turn should have positive effects on investment
Figure 1: 'Break-even' insurance premia
(a) Financial criterion only

(b) Financial and economic criteria
Table 2: BRAC and FINCA: indicators of impact

<table>
<thead>
<tr>
<th></th>
<th>BRAC, Bangladesh</th>
<th>FINCA, Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Operational indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>About 80% of costs of claims plus operations currently covered from premiums.</td>
<td>About 73% of costs of claims plus operations currently covered from premiums.</td>
</tr>
<tr>
<td>Arrears rates</td>
<td></td>
<td>1.6% of insured, 1.4% for uninsured (i.e. difference ‘positive’ but insignificant)1</td>
</tr>
<tr>
<td><strong>2. Indicators of direct impact</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings</td>
<td>Positive*</td>
<td>Positive (significant at 5% level)2</td>
</tr>
<tr>
<td>Investment</td>
<td>Positive*</td>
<td>Positive (significant at 1% level)2</td>
</tr>
<tr>
<td>Educational expenditure</td>
<td>Positive*</td>
<td>Positive (significant at 5% level)2</td>
</tr>
<tr>
<td>Loan growth</td>
<td>Positive (significant at 1% level)3</td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td></td>
<td>83% of respondents say that membership of the scheme gives ‘more peace of mind’</td>
</tr>
<tr>
<td><strong>3. Indicators of indirect (“wider”) impact</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial risk to sponsor</td>
<td></td>
<td>71% of respondents feel ‘less likely to get into financial trouble since joining the scheme2</td>
</tr>
<tr>
<td>Stability of income</td>
<td>Positive*</td>
<td>Insignificant difference between treatment and control group2</td>
</tr>
<tr>
<td>Social capital and intra-group relations</td>
<td>‘The scheme has encouraged us to take more interest in the quality of healthcare we are receiving’</td>
<td>Improved levels of trust within solidarity groups2</td>
</tr>
<tr>
<td>Incorporation of socially excluded</td>
<td>The scheme has been extended to a number of ultra-poor clients</td>
<td>Little evidence (indeed, scheme members are better off than non-scheme members)3</td>
</tr>
<tr>
<td><strong>4. Side-effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relations with hospital staff</td>
<td></td>
<td>Became more neglectful in some cases3</td>
</tr>
<tr>
<td>Care for personal health (moral hazard)</td>
<td></td>
<td>No evidence of moral hazard (DPT vaccination and malaria protection rates same between treatment and control group)3</td>
</tr>
</tbody>
</table>

Sources: BRAC: field tests, Sultanpur, April 2002. FINCA: 1 survey of 200 clients, January 2003, from FINCA records; 2 survey of 62 clients from Nsamba and Mukisa branches, Kampala, interviewed February 2003. Data for survey (2) available from p.mosley@sheffield.ac.uk and more detailed results are provided in Mosley (2003: Chapter 6).
– including human capital investment in education and training.

- Externalities from the downward extension of the market for financial services: If, because poorer people are more in need of institutions such as insurance, which protect livelihood security, poorer people may be brought into the market for financial services, and eventually derive benefit from it, in a manner that does not expose them to excessive levels of risk in the vulnerable early stages.

We can now introduce additional instruments, and examine the strategies by which different institutions have sought to balance viability against a focus on the poor:

- Marketing strategies and demand expansion: if these are successful, they can move the demand curve outwards, and enlarge the “triangle of profitability”. The experience of several institutions suggests that the insurance concept is not well understood by clients, so that even if their latent demand is strong on the grounds of risk aversion, their effective demand is weak. Some of this weakness arises from an under-estimation by clients of the risks to which they are exposed. Imaginative marketing strategies have been used by some organisations to overcome this blockage. But often what has caused a big surge in demand has been nothing to do with marketing policy, but rather an extraneous event which has made individuals only too well aware of the risks to which they are exposed – such as the Gujerat earthquake of January 2001, following which membership of the SEWA insurance scheme rose from 30,000 to 100,000 in a single year.

- Product diversification: this again can achieve a boost to demand if it becomes saturated within particular market sectors. Thus Grameen and BRAC of Bangladesh have diversified from life insurance into health insurance; BASIX from agricultural insurance, which it has now given up, into life and livestock insurance; and SEWA, which began by offering a basic life insurance product, into insuring healthcare for clients, their spouses and now (2002) their children. However, the diversification process is risky, because there is evidence among the first-generation schemes of a tendency for the cost of providing insurance to rise exponentially as the range of risks covered increases.

3. Wider impacts of micro-insurance and their management: evidence from two institutions

Under the Imp-Act programme, a range of impacts has been measured, or is in the course of being measured, for two of Imp-Act’s partner institutions, featured in the preceding section: BRAC, Bangladesh and FINCA, Uganda. Traditional control-group methods have been used with a group of insurance clients and non-clients in both institutions. The results are recorded in Table 2, and are divided into four groups:

- Indicators of operational performance;
- Indicators of client-level impact;
- Indicators of wider impact, which go beyond the individual client; and
- Side-effects.

We may briefly summarise these impacts as follows: the insurance schemes are quite close to being viable in their own right, and there is some evidence that they improve repayment rates; insurance appears to have a positive impact on physical and human capital expenditures, apparently mediated via higher absorptive capacity for loans; insurance clients perceive themselves as less vulnerable than non-clients; and several of the “wider impacts” on which we speculated above do indeed materialise, including, in Bangladesh, higher stability of income of expenditure and incorporation of the ultra-poor, and lower exposure for the lender.

Here, the focus is on the wider impacts, which fall, as earlier discussed, into four distinct categories. Table 2 provides some indication of what needs to be done to make these effects operational:

- Effects operating via stability of income and expenditure, which transmitted scheme benefits from clients to non-clients: These appear, in both countries, to have raised physical investment, often in the business, but
even more typically in the home. Land purchase was the most commonly cited form of investment under this heading. Sometimes insurance raised human capital investment; there were also, in Uganda, minor effects on labour hiring which had a small multiplier effect on poverty reduction.

- Effects operating via social capital and interpersonal relations: These are both positive and negative. Within local communities there is compelling evidence that “bonding” social capital, in the sense of trust, has indeed been strengthened as a consequence of the advent of insurance. In many cases this was as a consequence of expenditure and liability becoming more predictable, so that individuals had an increased incentive to trust one another. A particular aspect of this predictability was reduced reliance on informal emergency borrowing.

- Effects operating via the downward extension of the market for financial services: Especially in Bangladesh, pressure has been exerted to make sure that some ultra-poor clients join the scheme, and consequently, a social inclusion impact has been deliberately engineered into the implementation of the scheme. Again, this effect is not inescapable; in Uganda, in spite of our prior hypothesis that the demand for insurance would be greatest amongst the poorest, insurance scheme members are actually richer than the control group of non-members.

- Effects operating through the provision of an institutional model: For example, information on the design of the existing, pioneering, micro-insurance institutions and the lessons which can be learned from their experience can be transmitted almost without cost via the internet and other means to those wishing to emulate and improve on their precedent.

4. Conclusion

As this article has argued, micro-insurance is a fundamentally good idea, but one which is dependent on agents external to the typical market process. As a consequence there is a case for subsidy; however, there is also a case for regulation, since, because the protective motive of insurance appeals particularly strongly to the poorest people, the customers of micro-insurance schemes are at risk of exploitation within an unregulated market. Therefore creativity and flexibility are required by regulators to protect vulnerable customers, while at the same time enabling innovators to offer them an insurance product on a small and experimental scale.

Impact assessment, presented in Section 3, suggests that in some cases the expected benefits of micro-insurance do not materialise; in particular there is little evidence in Uganda that the advent of micro-insurance has enabled a downward extension of the market for financial services. However, even though much of the available evidence is still inconclusive, there is little doubt that the micro-insurance schemes examined have contributed enormously to the peace of mind of low-income clients, who are now able to afford such necessities as their children’s healthcare, without worrying about their debts.

Notes

1. BASIX is an Indian MFO comprising a non-banking finance company engaged in credit and an NGO engaged in technical assistance.

2. As the director of Grameen Kalyan put it, ‘people are not aware of their health before they become bedridden’. Interview, Sheikh Abdur Dayan, Dhaka, 8 January 2002.

3. The Peruvian microinsurance organisation IFOCC ‘created simple figures to help clients understand the benefit and the relative cost of the insurance. In addition, IFOCC helped clients to understand the relative size of the premium payments by asking them to think of the funds received from a loan as a jaguar, the interest paid on the loan as a rabbit, and the insurance premium as a cuy or guinea pig’ (Brown and Churchill 2000: 20).
### Organizational Type

<table>
<thead>
<tr>
<th>Date Established</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997 (Grameen)</td>
<td>1997 (Grameen)</td>
</tr>
<tr>
<td>2001 (Grameen)</td>
<td>2001 (Grameen)</td>
</tr>
<tr>
<td>1999 (Grameen)</td>
<td>1999 (Grameen)</td>
</tr>
<tr>
<td>1993 (Rural)</td>
<td>1993 (Rural)</td>
</tr>
<tr>
<td>1973 (Rural)</td>
<td>1973 (Rural)</td>
</tr>
<tr>
<td>2000 (modelled)</td>
<td>2000 (modelled)</td>
</tr>
<tr>
<td>2002</td>
<td>2002</td>
</tr>
</tbody>
</table>

### Scheme

- Health and Housing
- Health
- SEWA
- Grameen Kalyan
- FINCA Health
- Bangladesh Bank
- Bangladesh Development Bank
- Basic Health
- Rain
- Multipurpose Unit
- CERDEB
- NGOs
- SEWA

### Customers

- Served: 200,000
- Mission: Microfinance
- Personnel: 40
- Bank: BDIC

### Support

- Professional: 10
- NGOs: 20
- Banks: 10
- NGOs: 20
- Banks: 10
- NGOs: 20
- Banks: 10
- NGOs: 20
- Banks: 10
### Appendix 1 (cont.): Six 'new-generation' micro-insurance schemes: summary description

<table>
<thead>
<tr>
<th>Scheme</th>
<th>SEWA</th>
<th>FINCA</th>
<th>Grameen Kalyan</th>
<th>BRAC Health</th>
<th>CERU/DEB</th>
<th>BASIX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risks covered</strong></td>
<td>Health, life and asset insurance against fire, flood and natural calamities; husband's death and paid for hospitalisation</td>
<td>Hospital costs</td>
<td>Maternal and child health, check-ups, subsidised drugs</td>
<td>Maternal and child health, check-ups, subsidised drugs, hospitalisation partly</td>
<td>Rainfall more than 20% below moving average</td>
<td>Original scheme: shortfall of yield below specified level</td>
</tr>
<tr>
<td><strong>Defences against moral hazard</strong></td>
<td>Copayment (registration fee), exclusions*, payments limited to cases where patients hospitalised</td>
<td>Single risk which the insured cannot influence</td>
<td>Single risk which the insured cannot influence</td>
<td>Single risk which the insured cannot easily influence</td>
<td>Peer-monitoring of claims; claims assessed and verified by a village committee which includes a BASIX representative. At least 50% of indemnity value must come from member's own deposit in village fund</td>
<td></td>
</tr>
<tr>
<td><strong>Defences against adverse selection</strong></td>
<td>1. Life insurance compulsory for all borrowers. 2. &gt;60% of all members must enrol before coverage is extended to a village bank</td>
<td>Hospitalisation claims reviewed by doctor</td>
<td>Under rainfall insurance the risk suffered by all claim-holders is uniform in the event of deficient rainfall, and individuals with low yields do not have a superior incentive to seek insurance in relation to individuals with high yields</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table: Village Health Insurance Scheme (VHIS) Premiums and Benefits

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Basic</th>
<th>Cerulean</th>
<th>BRAC Health</th>
<th>FINCA</th>
<th>SEWA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium</td>
<td>6% of base loan</td>
<td>7% of base loan</td>
<td>8% of base loan</td>
<td>9% of base loan</td>
<td>10% of base loan</td>
</tr>
<tr>
<td>Benefits</td>
<td>1. 5%</td>
<td>2. 6%</td>
<td>3. 7%</td>
<td>4. 8%</td>
<td>5. 9%</td>
</tr>
</tbody>
</table>

**Premium Options:**
- Option 1: 5% (5% of income)
- Option 2: 6% (6% of income)
- Option 3: 7% (7% of income)
- Option 4: 8% (8% of income)
- Option 5: 9% (9% of income)

**Benefits:**
1. 5% 
2. 6% 
3. 7% 
4. 8% 
5. 9%

**Financing:**
- Membership fees
- Government subsidies
- Member contributions
- Premiums
- Loan from local government

**Exclusions:**
- Medical conditions due to alcohol or drug addiction
- Intentional self-inflicted injury or illness
- Injury or illness arising out of professional malpractice
- Injury or illness as a result of accidental death or accidental injury

**Notes:**
- Members are grouped into three categories:
  - Ultra-poor
  - Poor
  - Other special
- Benefits include:
  - Emergency medical care
  - Maternity care
  - Cancer screening
  - Mental health services
  - Nutritional support

**Appendix 1** (cont.): Six new-generation micro-insurance schemes: summary description.
References


Hazell, P, Pomareda, C. and Baldez, A., 1986, Crop Insurance and Agricultural Development, Baltimore: Johns Hopkins University


