
VI Insurers and microinsurance

18 **Is microinsurance a profitable business for insurance companies?**

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The question “Under what circumstances can insurance companies generate profits from microinsurance?” is important, because in many markets insurers are showing an increasing interest in expanding into the low-income market. To maintain the involvement of commercial players in this market, microinsurance needs to contribute to the overall profitability of the insurer and generate value for its shareholders. Profits over time must be sufficient to justify the investment required to support the development of the business.

This paper presents a case study analysis of the profitability of microinsurance provided by five insurers operating in different regions across the globe.

- Co-operative Insurance Company (CIC) in Kenya offers a compulsory credit life product and Bima Ya Jamii, a bundled voluntary health and life cover.
- Old Mutual in South Africa offers a group funeral cover.
- ICICI Lombard in India offers Manipal Arogya Suraksha Yojana (MAS), a group-based health insurance product, as well as crop cover based on rainfall index.
- Aseguradora Rural (ASR) in Guatemala offers a death and disability cover as well as a student cover, which provides a life policy with an additional health cover.
- Malayan Insurance in the Philippines offers a life cover with additional benefits such as fire assistance.

Although the experiences in these case studies are unique, the challenges and successes of these microinsurance initiatives provide insights into possible approaches to improving viability for other players in the market.

This chapter considers exclusively the commercial viability of microinsurance, but there are other reasons for insurers to target the low-income market (*see*

Chapter 19). Most evident from the case studies are social objectives to improve quality of life for the poor. Given the importance and prevalence of social objectives, a complete review should factor in an initiative's client value proposition (see *Chapter 15*). The question of profitability needs to be balanced with the extent to which products provide value to the client, because long-term sustainability depends on the value proposition.

Despite the social motivation, it is important that microinsurance be viable to maintain the involvement of insurers. The case studies indicate that microinsurance can be profitable. However, there are instances where the insurers have found it difficult to establish a profitable initiative and have engaged in an iterative process of restructuring it to achieve profitability.

For the most part, the insurers have not formally monitored the costs associated with microinsurance. As a result, expenses were allocated using a proportional method, where the management costs of the relevant business segment or overall company were allocated to the microinsurance business on the basis of premium volumes. It is possible that if the costs were more accurately allocated to microinsurance, expense ratios would be higher. As business grows, it will become more important for insurers to monitor expenses accurately to better understand the commercial viability of microinsurance.

The chapter is organized as follows. Section 18.1 provides an overview of the framework and drivers of profitability. Section 18.2 sets out the context for the insurers, the sector they operate in and their microinsurance initiatives. Financial analysis and an examination of the drivers of profitability for each of the microinsurance initiatives are outlined in section 18.3. Section 18.4 concludes with the main findings from the case studies and recommends areas for future research.

18.1 Framework for the assessment of profitability

Table 18.1 provides an overview of the framework developed to assess the profitability of microinsurance, which includes three main drivers of profitability: achieving scale, managing claims costs, and managing acquisition and administration costs. The two aspects at the base of the diagram cut across the drivers of profitability and form the foundation needed for successful initiatives.

Table 18.1

Framework for assessing the profitability of microinsurance initiatives

<i>Scale: selling and retaining large business volumes</i>	<i>Claims costs</i>	<i>Acquisition and administration costs</i>
<ul style="list-style-type: none"> – Defining and accessing the market – Providing valued benefits and meeting the needs of the market while maintaining premiums at a reasonable level – Incentivizing distribution channels to sell and renew voluntary products – Building relationships with the market and servicing policies efficiently 	<ul style="list-style-type: none"> – Pricing the risk – Managing anti-selection, moral hazard and claims fraud – Use of reinsurance and managing claims volatility and co-variant risk 	<ul style="list-style-type: none"> – Working with partners and groups – Making use of existing infrastructure – Simplicity and efficiency in distribution and administration systems
Organizational structure and market context Monitoring experience		

The framework shown in Table 18.1 uses excess of income over outgoings as shown in the revenue account as the measure of profit in the period. The profit for a given period is an absolute measure and is therefore difficult to compare with the profits of other microinsurance initiatives or lines of business in isolation. The framework therefore measures the overall profitability of the microinsurance initiative relative to premium income, as depicted in Box 18.1.

Box 18.1

Measurement of profitability

$$\text{Gross insurance profit ratio} = \frac{\text{Gross insurance profit}}{\text{Gross earned premiums}}$$

Profit is also measured in terms of net insurance profit to net earned premiums (after allowing for reinsurance).

The return demanded by investors is usually related to the capital required as well as the risk of the initiative. If insurers want to have a better understanding of the value to shareholders generated by microinsurance, it is important to keep track of capital and other resources devoted to this business, and monitor the profits on the investments. It was not possible to provide insights into the return on investment for the case studies due to a lack of data from insurers on the amounts invested in building the business. Some qualitative insights into the resources devoted to the business are given in the analysis section.

18.2 Context and setting the scene

This section gives an overview of the five microinsurance initiatives studied and the environments in which they operate (see Table 18.2 for a summary).

18.2.1 Co-operative Insurance Company (CIC), Kenya

The Kenyan insurance industry is underdeveloped compared to other sectors of the economy with insurance penetration remaining at around 2.6 per cent in the past few years. The majority of this penetration is attributable to compulsory motor third-party insurance and compulsory government insurance and pensions from the National Hospital Insurance Fund (NHIF) and the National Social Security Fund (NSSF). Insurance activity in the low-income market has increased in recent years, with many traditional insurers showing interest in this market. A range of products has recently been introduced, including health, credit life, personal accident and crop insurance.

Co-operative Insurance Company (CIC) is an established insurer that is owned by over a thousand cooperatives. It is the only cooperative insurer in Africa and is the eighth largest insurer in Kenya. CIC has been active in the low-income market for a number of years, administering a handful of products through its existing traditional insurance departments. Given its experience in the market and dedication to expanding its microinsurance business, CIC established a microinsurance department in 2010. CIC has benefited from its links with the cooperative movement in Kenya, which have allowed it to form partnerships with many credit cooperatives.

Among the microinsurance products offered by CIC are a group credit life product and a bundled product known as Bima ya Jamii (Insurance for the Community). Credit life is the oldest of CIC's microinsurance products, offered to microfinance institutions (MFIs) and savings and credit cooperatives (SACCOs) since 2002. The product is compulsory for all borrowers. It covers the borrower for the period of the loan and pays the value of the outstanding loan plus interest to the lender in the event of a borrower's death or disability. An additional payment of US\$130 to the disabled borrower or their surviving dependents was introduced in 2010 at no additional cost.

The credit life product has been a means for CIC to generate profits to support the development of riskier microinsurance products, such as Bima ya Jamii, which provides a hospitalization, funeral expense, loss of income and personal accident benefit for the principal member and named dependants. Bima ya Jamii has been revised over time, mainly as a result of difficulties experienced with the hospitalization component of the product. In the most recent (and most successful) version of the product, CIC outsourced the hospitalization benefit to the NHIF, which has more experience in managing health insurance risk.

Bima ya Jamii, like the credit life product, is sold through SACCOs and MFIs. However, it is not compulsory for all members of the MFI or SACCO. CIC relies on these channels to sell the product to their customers. This structure posed challenges for CIC, with partner remuneration needing improvement to

incentivize sales. CIC has recently engaged an agency to assist in managing sales at the MFI and SACCO branches. The agency is responsible for training the sales clerks in the workings of Bima ya Jamii, providing consumer education at the point of sale, and providing customer support on behalf of CIC (for both the partner and the policyholders).

Table 18.2

Overview of microinsurance initiatives

	<i>Products</i>	<i>Target market</i>	<i>Distribution and administration</i>	<i>Structure</i>
Co-operative Insurance Company (CIC), Kenya	<ul style="list-style-type: none"> – Credit life: compulsory – Bima ya Jamii: voluntary bundled hospitalization and life insurance cover <p>Credit life shows large profits from inception Growth difficult to achieve for the voluntary product</p>	<p>Members of micro-finance institutions (MFIs), savings and credit cooperatives (SACCOs) and other self-help groups</p> <p>Large MFI and SACCO membership in Kenya</p>	<p>MFIs, SACCOs and other groups</p> <p>Exploited existing relationship with these groups</p>	<p>Planning to set up a separate microinsurance business unit</p>
Old Mutual, South Africa	<p>Burial Society Support Plan: group funeral cover</p> <p>Funeral cover is popular in South Africa, but this is a highly competitive market</p>	<p>Members of burial societies, funeral parlours and savings clubs</p> <p>Difficult due to small group sizes</p>	<p>Salary agents who work with groups are responsible for the selling and servicing of policies</p> <p>Costly distribution model</p>	<p>Set up the Foundation Market business unit to focus on the low-income market</p>
ICICI Lombard, India	<ul style="list-style-type: none"> – Manipal Arogya Suraksha: group-based health insurance – Index-based weather insurance: crop cover based on rainfall index (bundled with credit) <p>The Government created awareness for index-based insurance Difficult to make health insurance product profitable</p>	<ul style="list-style-type: none"> – Community groups along western coastline of India – Customers of MFIs, rural banks and other credit providers 	<ul style="list-style-type: none"> – Network of health-care providers – MFIs and other credit providers <p>First mover advantage is important in establishing relationships with these groups</p>	<p>Microinsurance products are managed under business units organized by product line. There is no separate microinsurance business unit.</p>
Aseguradora Rural (ASR), Guatemala	<ul style="list-style-type: none"> – Life cover: death and disability cover – Student cover: life policy with additional health cover <p>Both products have been profitable since their launch</p>	<p>Clients of BANRURAL (rural bank)</p>	<p>BANRURAL network of bank branches</p> <p>Built on infrastructure of the parent company</p>	<p>Microinsurance products are managed under the life insurance business department</p>
Malayan Insurance, Philippines	<p>Life cover with additional benefits (e.g. fire assistance)</p>	<p>Clients of pawn shops, rural banks and lending intuitions, cooperatives and NGOs</p>	<p>Pawn shops, rural banks and other credit providers</p> <p>Exploited partner's large footprint in the low-income market</p>	<ul style="list-style-type: none"> – Managed by the Retail Underwriting Group – Plan to move microinsurance to subsidiary in 2011

18.2.2 Old Mutual, South Africa

Traditional insurance provision in South Africa is highly developed and is comparable to developed nations in terms of both size and degree of sophistication. However, the low-income market is underserved. As a result, there have been increased efforts in recent years, in both the public and private sectors, to improve the provision of insurance in this market. A variety of insurance products are now available to low-income South Africans, the most dominant of which are voluntary funeral products provided by both formal (e.g. insurers) and informal providers (e.g. burial societies and funeral parlours). The funeral insurance market is highly competitive. Insurers have used a range of distribution channels to reach the market from the traditional agent model, to partnerships with church groups, retailers, burial societies and funeral parlours. Products are also sold through banks.

Old Mutual is the country's largest and oldest life insurer, offering a wide range of products across all income segments in South Africa. The Retail Mass Market, which targets clients in the middle- to low-income groups, is an important business unit for Old Mutual, making a significant contribution to its growth and profitability. The success of the Retail Mass Market unit led to the creation of the Foundation Market business unit in 2008 to develop products exclusively for the low-income market. The Foundation Market was set up as an independent business unit to provide microinsurance with sufficient attention to allow it to grow and eventually contribute to Old Mutual's profitability.

Old Mutual's burial society support plan provides a cash payout on the death of a covered life. It covers the principal member, with the option to add immediate family members, and is distributed through burial societies and funeral parlours using salaried agents. Once a burial society or funeral parlour opts to take the cover, the cover becomes compulsory for all members, who each pay a monthly premium. Burial societies and parlours can select from a range of sums assured, with the selected cover level applicable to all members, who therefore all pay the same monthly premium. Both the product design and the distribution model are common in the South African market.

Due to existing cultural norms, the product is popular and therefore relatively easy to sell. However, using salaried agents to distribute the product is expensive. Furthermore, burial societies tend to be small, so that scale has been difficult to achieve. Another challenge has been the large number of competitors in the market, which has meant that the high distribution costs of the product could not be fully reflected in the product premiums. The Foundation Market unit has, however, benefited from access to technical skills and infrastructure in other business units, which has helped keep overheads low. Old Mutual is prepared to provide this support until the business unit becomes profitable and can sustain its own expense base.

18.2.3 ICICI Lombard, India

ICICI Lombard was established in 2001 when the Indian insurance market opened to privately owned operators (*see Chapter 20 for more details*). Today, it is the largest private-sector non-life insurer in India, offering a full range of retail and commercial products. ICICI Lombard's microinsurance business mainly originates from group schemes sold through partnerships with large and reputable NGOs and MFIs, as well as government-funded schemes. In 2008, the Indian Government introduced a national health insurance fund known as Rashtriya Swasthya Bima Yojana (RSBY). ICICI Lombard has focused on successfully procuring RSBY bids from various districts, and this is a major part of its continuing microinsurance strategy.

Among the many microinsurance products underwritten by ICICI Lombard is an index-based weather insurance product, which the insurer pioneered in 2003 with a leading MFI, BASIX. The product is sold to farmers throughout India through credit providers. The Government also plays a significant role in promoting sales by subsidizing the product premiums by up to 80 per cent for farmers applying for agricultural credit. The product provides a payout in the event of either low rainfall or excess rainfall, at the option of the insured. Payouts are progressive once rainfall in an area falls short or is in excess of a predetermined limit. The weather product has benefited from government campaigns to heighten awareness of index-based insurance (*for more details see Chapters 4, 11 and 20*).

ICICI Lombard also underwrites several health products including one known as Manipal Arogya Suraksha Yojana, (MAS) which is offered to low-income families in the coastal districts of the states of Kerala, Karnataka and Goa. This product provides a hospitalization benefit and additional cover for 30 days prior to and 15 days after hospitalization for the principal member and their immediate family. It is sold on a group basis to community groups (or clusters) such as churches, temples and self-help groups. This product was developed in conjunction with the Manipal Group, a diversified enterprise engaged in areas of health care and education. Manipal owns 11 hospitals, at which the benefits under the health product can be redeemed. Administration of the product is shared between ICICI Lombard and the Manipal Group.

Manipal Foundation, a corporate social responsibility team of the Manipal Group, provides premium subsidies in varying proportions to families who cannot afford the premiums.

18.2.4 Aseguradora Rural (ASR), Guatemala

A large proportion of the Guatemalan population in both low and the middle-income groups are excluded from formal financial services. The insurance market in Guatemala is relatively small, with 17 insurers in total covering the life and

non-life markets. Insurance penetration in the country is low at 1.2 per cent and has remained relatively stable over the past few years. Few insurance companies in Guatemala have ventured into microinsurance, with only three showing significant activity. Competition is therefore limited.

Aseguradora Rural (ASR) is a small insurer, established in 1999 to operate in both the life and the non-life markets. It is wholly owned by BANRURAL, a large local bank focused on extending financial services to the rural population. ASR's strategy is aligned with that of BANRURAL, with a focus on providing insurance to the rural market. The insurer has launched four microinsurance products to date and this business has experienced significant growth since its inception accounting for 28 per cent of ASR's total gross premiums in 2009. The microinsurance business is administered under the traditional insurance operational structures within ASR. There is, however, a team allocated to managing the relationship between ASR and BANRURAL's agency network, which currently distributes all of ASR's microinsurance products.

This study considers a life product and a health policy for students. The life product constituted approximately 90 per cent of ASR's total microinsurance gross premiums in 2009. It was ASR's first microinsurance product, providing life, funeral and disability cover. A range of annual premium and benefit levels are available to choose from, with different plans available for the 15 to 50 age group and the 51 to 64 age group. To purchase a policy, the client needs to be a BANRURAL accountholder, though it is not compulsory for BANRURAL's customers to purchase the product.

ASR's student policy provides a death and disability benefit for principal members and a health benefit for financially dependent minors. The product benefits include:

- for minors, healthcare services provided by ASR's partner healthcare network Empresa Promotora de Servicios de Salud (EPSS) or reimbursement of health expenses in a different healthcare centre in the event of an accident, ambulance service in the event of an accident, daily payment for hospitalization in the event of an accident or disease, and medical assistance 24 hours a day.
- for the parent, cover in the event of death deriving from a natural or accidental cause and cover in the event of permanent and total disability.

A range of premium and benefit levels for both components are available. As with the life product, policyholders are required to have an account with BANRURAL, although the product is not compulsory for all accountholders. ASR spends a significant amount of time managing BANRURAL's role in the distribution of the product, and motivating the bank's agents to sell the product has posed a challenge.

18.2.5 Malayan Insurance, Philippines

The Filipino insurance industry is small but growing, accounting for 1.2 per cent of GDP in 2006. Insurers are starting to target the low-income market and are offering a range of products: whole life, accident, burial and medical benefits plans, asset protection for microentrepreneurs hit by fire, lightning, flood, typhoon or earthquakes, and weather-index crop insurance. In addition, the Government developed the “National Strategy and Regulatory Framework for Microinsurance” to promote growth in the microinsurance sector, while protecting consumers by requiring retail sellers of insurance policies to either register a mutual benefit association (MBA) or form a partnership with a regulated insurer (*see Chapter 25*).

Malayan Insurance, the largest general insurer in the Philippines, has been active in the low-income market as part of an expansion strategy into new markets. It relies on three distribution channels to service the low-income market:

- **A national pawn shop network**, with more than 1 200 branches, provides personal accident insurance with fire assistance
- **Rural banks and lending institutions** provide consumer and retail lending to livelihood projects and microenterprises through 78 branches nationwide
- **Cooperatives and NGOs** provide weather-index, life and fire insurance

18.3 Financial analysis and drivers of profitability

This section investigates the overall profitability of these microinsurance initiatives and explores the factors underlying their financial viability. The analysis uses a combination of performance indicators derived from financial information and insights gained from the interviews with managers at the insurers. These insights are particularly helpful in understanding the financials and identifying elements of the initiative that may be contributing to the profit or creating losses for the business.

18.3.1 Overall assessment of profitability

For microinsurance initiatives to be viable business propositions, they need to make a contribution to overall profitability of the business relative to their risk and the investment of capital and other resources required. Table 18.3 shows the gross insurance profit ratios (i.e. before reinsurance costs) for the products investigated in this study.

Table 18.3

Gross insurance profit ratios¹

<i>Insurer</i>	<i>Product</i>	<i>2009 (%)</i>	<i>2008 (%)</i>	<i>2007 (%)</i>
CIC, Kenya	Bima ya Jamii (accidental death and disability bundled with National Hospital Insurance Fund)	27	51	60
	Credit life	66	66	69
ICICI Lombard, India²	Manipal Arogya Suraksha (MAS) (health insurance)	(32)	(30)	(30)
	Weather insurance (index-based weather insurance)	1	5	(35)
Old Mutual, South Africa	Burial Society Support Plan (funeral insurance)	0 to 5	(25 to 35)	(20 to 25)
ASR, Guatemala	Life cover (accidental death and disability)	67	46	85
	Student cover (accidental death and disability)	56	67	
Malayan, Philippines	Microinsurance business (mainly accidental death and disability)	47	35	47

¹ Gross insurance profit ratio = (Gross premiums – Gross claims – Expenses)/Gross premiums.

² All the figures for India in the financial analysis section are for the financial year 1 April to 31 March.

CIC

The allocated expenses for Bima ya Jamii were based on the direct expenses determined by CIC with an addition of a proportion of the group life expenses allocated to this product, based on assumptions made by the researchers. No expenses were allocated individually to the credit life product.

Both of the CIC microinsurance products investigated in this study are profitable. The credit life product is more profitable than the bundled health insurance product and is the most profitable of all the products in the case studies. CIC used its experience with credit life to learn about the market. The profitability of credit life supported the expansion into other microinsurance products such as the bundled health product.

The bundled health insurance product was loss-making until it was relaunched as Bima ya Jamii with the health insurance component underwritten by the NHIF. The following keys to the profitability of the CIC microinsurance products were identified:

- partnerships with a large number of MFIs and SACCOs;
- exploiting the existing infrastructure of the distribution channel and paying low fees for selling and servicing business;
- compulsory nature and high margins of the credit life product;
- bundling life benefits with the more popular health benefits;
- outsourcing the risk of the health cover to the NHIF;
- difficulty in achieving adequate business volumes for Bima ya Jamii due to a lack of incentives for individual sales staff;

- more accurate monitoring of expenses for Bima ya Jamii led to a decline in profitability levels.

ICICI Lombard

ICICI Lombard restructured its operations in 2008. Since then, there has been no separate business unit for microinsurance or rural and social sector business. Both of the business units where the two microinsurance products are housed are also responsible for products sold to other market segments.

Actual administration costs and non-commission acquisition costs relating to microinsurance were not available from ICICI Lombard. In addition, researchers were provided with budgeted, rather than the actual expense amounts. However, given ICICI Lombard's policy of strict adherence to expense budgets, there is little scope for variance between the budgeted and actual costs. The expense allocation method assumes that the cost of writing the business is proportional to the premium income.

There is no reserving for the index-based weather product due to the structure of the product. Premiums earned and claims incurred are equivalent to written premiums and paid and reported claims. The financial analysis for the index-based weather insurance is based on results gross of reinsurance premium. ICICI Lombard did not disclose the figures net of reinsurance premium or claims information for the weather insurance product, as this would constitute commercially sensitive information. For consistency, the figures show the results gross of reinsurance for both products.

It has proved difficult to achieve profitability in either of these microinsurance initiatives. The weather insurance product appears to be just breaking even before reinsurance is taken into account. The MAS health insurance product has been consistently generating negative returns due to high claims ratios. ICICI Lombard has introduced measures to improve the claims experience of the health insurance business, but the effect of this action has yet to be seen in the profit ratios. The following keys to the profitability of the ICICI Lombard microinsurance products were identified:

- partnerships with a large number of credit institutions for the weather insurance product and the healthcare provider network for the MAS product;
- compulsory nature of weather insurance for all members of the group;
- using the longstanding relationship of the healthcare provider with the community, as well as the insurer's staff, to encourage enrolment;
- claims risk poses a challenge for both products, protected by reinsurance for weather insurance, which is a key reason why ICICI Lombard can provide this cover;
- mutually beneficial relationship with the distribution channel facilitates lower fees for services and access to infrastructure;

- managing microinsurance together with traditional insurance business on a product line basis facilitates access to the resources of the business unit and allows expenses to be subsidized by the business unit as a whole;
- support from government and the healthcare network creates awareness of the products;
- combining social objectives with insurance enables premiums to be subsidized by the government (weather index) and by the Manipal Foundation (health).

Old Mutual

Old Mutual's practice in the traditional insurance market is to maintain sufficient information on each customer to monitor experience with the customer portfolio. Such business practices follow through into the Foundation Market's business. Expenses are monitored and allocated to each product within the Foundation Market's portfolio, permitting accurate pricing.

The data received from Old Mutual was fairly comprehensive, providing details of the reserves for the product as well as management expenses allocated to it. Since reserving is relevant for the burial society product, the financial ratios are based on earned premiums and losses incurred. The allocated management expenses were used in assessing the profitability of the initiative.

Old Mutual's group funeral product had been loss-making since its launch in 2003 and has only in the last year managed to break even due to action taken to manage loss ratios. The following keys to the profitability of the group funeral products were identified in the case study:

- actions taken to reduce the number of loss-making groups on the books are starting to improve the poor claims experience;
- the salaried-agent delivery model is expensive relative to premium volumes generated, a problem exacerbated by small group sizes;
- setting up a separate business unit for the Foundation Market to focus on expanding insurance into the low-income market, but still having access to resources from other business units at the insurer.

ASR

ASR does not analyse claims and expenses specifically for microinsurance in its monitoring and performance management system. Expenses are managed at company level and any deviation from the budget objectives is analysed.

The analysis of profitability in Table 18.3 is based on the premiums received and claims reported in the year, and an allocated amount of expenses, reserves and investment income. The claims expenses were identified both for each product and for the consolidated microinsurance business.

The marketing expenses and training expenses are managed at company level and were distributed on the basis of gross premium. The expenses relating to promotion activities that were directly identified for the microinsurance products were allocated accordingly. The allocated amount of sales incentives is based on the number of policies sold. The rewards, bonuses and administration expenses were allocated on the basis of the gross premium.

Relevant reserves were taken into account and the financial statements are based on premiums earned and claims incurred.

The microinsurance initiatives of ASR have shown good annual profits since the inception of the business in 2007. Both products have achieved comparable levels of profitability. The life product is a major contributor to overall profitability due to the sales volume it generates. The following profitability drivers were identified in the case study:

- providing simple products that have not previously been widely available in the market;
- using limited underwriting and exclusions to manage claims risks;
- partnership with the parent bank with a vast footprint in the low-income market;
- paying no fees for access to the infrastructure and the services provided by BANRURAL.

Malayan

Malayan's microinsurance initiatives have been profitable since the initial investment in 2004. The following keys to the profitability were identified:

- providing simple accidental death and disability products with additional cover (e.g. fire) that is valued by the target market;
- partnership with the pawn shops, rural banks and credit providers with a vast footprint in the low-income market;
- making changes to the cover over time based on experience (e.g. removing the “unprovoked murder and assault” exclusion from products sold through pawn shops).

18.3.2 Achieving scale

Microinsurance needs to reach high volumes to generate profit and justify the resources required to build the business. This can be a challenging task in the low-income market and insurers use strategies to achieve scale, such as working with aggregators, tapping into existing demand and offering compulsory products. The scale reached by a microinsurance initiative is often measured in terms of covered lives and premium volumes (*see Table 18.4*).

Table 18.4

Premium volumes and covered lives

Insurer	Product	Gross written premiums (US\$'000)			Covered lives		
		2009	2008	2007	2009	2008	2007
CIC, Kenya	Bima ya Jamii ¹	142	137	27	18 872	17 461	3 625
	Credit life ²	3 919	2 356	2 196	256 762	170 725	159 047
ICICI Lombard, India	MAS health insurance	1 323	1 008	539	550 194	511 456	318 334
	Weather insurance	20 490	4 637	1 383	259 958	108 819	43 278
Old Mutual, South Africa	Group funeral	n.a. ³			400 000 to 450 000	400 000 to 450 000	500 000 to 600 000
ASR, Guatemala	Life cover	4 789	2 603	2 143	123 429	75 004	42 184
	Student cover	175	36		20 554	3 984	
Malayan, Philippines	Microinsurance business	1 913	1 246	815	5 009 089	4 334 887	4 113 975

¹ The low policy volumes for ASR's student cover and Bima ya Jamii are partly explained by the fact that these products are relatively new, having been launched in 2008 and 2007 respectively.

² Compulsory products bundled with credit.

³ Old Mutual was unable to disclose premium volumes as this would constitute competitively sensitive information for the insurer.

Although the case studies show a substantial number of covered lives, microinsurance premiums are relatively small compared to premium volumes for traditional business (at 3 per cent or less for all the initiatives except CIC's credit life and ASR's life cover).¹ Microinsurance product lines will need to expand significantly before they make a tangible impact on the business of the insurer as a whole.

Growth in credit life for CIC and the life product for ASR has enabled these products to make up a significant proportion of the gross premium volumes of the life business of these insurers (25 per cent and 37 per cent respectively in 2009). At ASR, the growth in the microinsurance business exceeded the expectations of the insurer. ASR attributed the boost in sales to a new commercial direction strategy and the establishment of a department in charge of the relationship with the distribution channel. ASR developed and implemented a new marketing and promotion methodology and an incentive system to focus on the microinsurance initiatives.

For several schemes viability depends on continued growth. Old Mutual's policy volumes are not high enough to cover distribution costs. ICICI Lombard's health product has not gained sufficient penetration within groups to counter anti-selection. ICICI's weather insurance product has not attained the geographical spread needed to enable the insurer to retain more of the premiums and rely less on reinsurance.

¹ This information is not available for Malayan.

Growth in premiums

A number of products investigated show substantial growth trends. These trends, coupled with the large size of the untapped market, indicate opportunities for growth in these markets. Table 18.5 shows the growth in premium volumes over the past two years.

Table 18.5

Growth in premiums and renewal rates

<i>Insurer</i>	<i>Product</i>	<i>Growth in gross written premiums (%)</i>		<i>Renewal rate (%)</i>	
		<i>2008–2009</i>	<i>2007–2008</i>	<i>2008–2009</i>	<i>2007–2008</i>
CIC, Kenya	Bima ya Jamii	3.7	412.4	30	6
	Credit life ¹	66.3	7.3	81	78
ICICI Lombard, India	MAS health insurance	31.3	87.2	n.a.	
	Weather insurance	341.9	235.2	n.a.	
Old Mutual, South Africa	Group funeral	18.0	2.0	60	50
ASR, Guatemala	Life cover ²	84.0	21.5	87	64
	Student cover	389		68	
Malayan, Philippines	Microinsurance business	54	53	n.a.	

¹ The renewal rate for the credit life product is based on the number of partners.

² Average premium.

Growth in the premium volumes for the CIC credit life product and the ICICI Lombard weather insurance product is supported by the increase in the number of partner savings groups and credit providers as well as high levels of retention of existing partners.

The main challenges in growth have been experienced by CIC with Bima ya Jamii and Old Mutual with the group funeral product. The policy volumes and retention levels for Bima ya Jamii are below the level targeted by the insurer, partly due to the lack of active selling to individual group members. For group funeral products, Old Mutual has undertaken an exercise to reduce the number of loss-making burial societies on the books over the past three years. As part of this exercise, Old Mutual increased the premiums for burial societies where the business was loss-making. This resulted in many of these schemes failing to renew cover and a decline in business volumes.

The experiences of the various insurers provide insights into factors underlying the growth in business volumes and the achievement of scale.

Working with partners and existing groups to access the market

All these insurers work with aggregators such as MFIs, SACCOs, NGOs, health service providers and burial societies to access the market. Their experiences illustrate the following benefits of working with partners to reach scale in the low-income market:

- Working with a partner with a large number of branches or access points allows the insurer to develop a broad, diversified customer base. ASR benefits from access to four million BANRURAL customers and Malayan's partnership with pawn shops provides access to a large segment of the low-income market.
- The insurer can use the partner's infrastructure to access the market as part of the existing activities of the policyholders (e.g. making repayments on the loan to the MFI). This reduces costs for the insurer and the customer. ASR is able to exploit the large presence of BANRURAL in the country (around 750 sales points covering 80 per cent of the country).
- It is easier to achieve scale where products are compulsory and bundled with other financial products provided by the partner (e.g. credit from MFIs). Compulsory cover for all group members or selling the policies in bulk is used for CIC's credit life product, ICICI Lombard's weather product and Old Mutual's group funeral product.
- The partners' existing links to the market and relationship of trust can facilitate expansion into the market. ASR uses the good image of the bank to promote its microinsurance. ICICI Lombard works with the trusted Manipal Group, which has been involved with the communities for a long time.

Insurers were able to build successful partnerships by employing the following strategies:

- Existing relationships with partners of the same financial services group created a competitive advantage for CIC, ICICI Lombard and ASR.
- First-mover advantage to lock in the relationship with the partners and maintaining these relationships by delivering efficient service was shown to be important in the longer-running initiatives of CIC and ICICI Lombard.
- Creating mutually beneficial relationships with partners, where the insurer is able to negotiate lower fees with the partner. The credit life and index-based insurance products directly benefit the partner by protecting the loan from default in the event of death or crop failure. ICICI Lombard's health insurance product offers the healthcare provider a tied client base.
- Building and maintaining relationships with partners through good service levels and the satisfaction of individual clients. High retention rates of partners of

between 80 per cent and 100 per cent seem to indicate that most of the insurers in this case study appear to have achieved this (as seen in *Table 18.5*).

- Old Mutual's distribution model requires agents to sell business in and around the community in which they live. This promotes a relationship of trust between the agents and the policyholders. This was an important factor in its growth, especially in the case of burial societies, which are community-centred. While Old Mutual has been able to reach a large number of lives using this model, the policy volumes do not support the costs of the salaried agents and there are other players in the South African market that have reached higher policy volumes using partnership distribution models, e.g. through church groups and retailers.
- All the insurers have been involved in building the capacity of partners. Insurers helped partners set up infrastructure and systems to achieve efficiency in processes and ease of flow of information between the insurer and the partner.

Affordability and competitiveness of premiums

Setting premiums at a level that is appropriate for this market is critical. It is often difficult to balance provision of the benefits demanded by the market with premium affordability and financial viability. The insurers in the case studies handled the issue of affordable premiums in the following ways:

- For the life cover and weather products, the insurers deal with the issue of affordability of premiums by offering products with limited benefits.
- Old Mutual and ASR introduced a range of benefit-level options to allow customers to select an affordable price point, while the cover level is still of value. For Old Mutual this was in response to a finding that a number of burial societies were lapsing as they were forced to select options that were too expensive.
- Flexibility in premium payment options is important. ASR allows for monthly, quarterly or annual payment of premiums. By contrast, CIC indicated that its annual premium payment for the Bima ya Jamii product was too expensive for many prospective clients.
- Competitiveness of premiums is an important issue in the group funeral insurance market in South Africa. The premium amount is often a key consideration in the selection of an insurer for the larger funeral parlours and burial societies. To remain competitive, Old Mutual has had to maintain premiums at a lower level than that which would support the high cost of distribution of the initiative until business volumes reach a commercially viable level. This fiercely competitive environment was not found in the other case studies, but may become an issue as more players enter the various markets.
- The difficulty in reconciling provision of the benefits demanded by the market with premium affordability and financial viability is illustrated by the experience of CIC with the bundled health product. CIC expanded benefits on the bundled

health insurance product on the basis of suggestions by partners, which led to the business making large losses. This prompted CIC to enter into the relationship with the NHIF. In addition, the NHIF proposed a 50 per cent premium increase in 2010, which will affect the affordability of Bima ya Jamii.

- Regulation can affect how premiums are set, as seen in the experiences of Malayan and ICICI Lombard (*see Box 18.2*).

Box 18.2

Regulatory implications for premiums

For Malayan and ICICI Lombard, external factors such as regulated maximum premiums for microinsurance and premiums subsidies have played an important role. Malayan's microinsurance products must meet the regulatory requirements in the Philippines, where maximum premium levels are set as a proportion of the disposable income of various segments of the low-income market (*see Chapter 25*).

In India, the need for affordability of premiums is addressed through premium subsidies rather than an intervention in pricing. These premium subsidies allow the products to reach market segments that would otherwise be excluded because of affordability issues. The advantage to ICICI Lombard of expanding the potential target market for products demonstrated the benefits of aligning products with social objectives, where there are benefits to the community beyond insurance cover (e.g. improved health of the community).

Products and benefit design

Insurers in the case studies developed products with generic benefits that appeal to a broad customer base. The advantages of this can be seen in the scale reached by the CIC credit life product, ICICI Lombard's index insurance, Malaysia's microinsurance business and ASR's life cover. By contrast, ICICI Lombard's MAS health product is designed for a specific segment of the market, the target market being limited to the geographical areas in which the healthcare provider operates. This constraint limits the overall market, but allows the insurer to develop cover that is more tailored to the needs of the community.

Demand for healthcare services in the low-income market is high. CIC and ICICI Lombard have taken advantage of this in linking insurance to a healthcare provider that has a reputation for providing quality services. CIC has worked in partnership with the public NHIF to provide the hospitalization component of the bundled Bima ya Jamii product. This partnership offers unique benefits to CIC in that the insurer is able to increase the appeal of the product by including the health benefit, but the risk is carried by the NHIF. ICICI Lombard has worked with the Manipal Group to provide cover through its hospital network. The challenges of achieving sufficient scale for voluntary products are seen in the

low policy volumes of both these products. For CIC the policy volumes are only 63 per cent of the targeted policy volumes set by the insurer after three years, and for ICICI Lombard enrolment rates are below the target of 60 per cent for the majority of clusters.

These insurers all receive input from the partners and community groups at the inception stage and over time on possible improvements to the benefit design:

- CIC approaches the potential partner MFI or SACCO with the product idea, so that the partner can provide input on whether sufficient demand for the product exists. The product is then piloted with the partner and, if successful, rolled out to other partners.
- ASR benefits from BANRURAL's agents' knowledge of customers. ASR receives input from BANRURAL when developing a new product in order to evaluate whether the product meets customers' needs.
- The Manipal Group has a long-standing relationship with the community that has helped ICICI Lombard develop health insurance that meets the needs of the market.
- Old Mutual has relied on insights into the needs of the market from its social responsibility initiatives.²
- Customer inputs are a major component of Malayan's product development process.

Although the analysis of the factors underlying retention of business indicated that providing benefits that were perceived by the customer as providing value is important, the value of products to customers was not explicitly assessed as a measure for the success of the initiative.

Incentives to sell and retain business

ASR and Malayan implemented incentive programmes for their partners' agents. ASR saw an increase in premium volumes after the implementation of a programme that provided incentives to the sales staff at an individual as well as team level.

Old Mutual structured its incentive packages for salaried agents to focus on servicing existing schemes as well as selling new business. Old Mutual agents

² The Foundation Market has strong ties to Old Mutual's corporate social responsibility initiatives, including a consumer education programme and a Masisizane Fund that provides loans to small and medium-sized enterprises. Old Mutual has used its experience with these initiatives to gain an understanding of the market and generate leads for marketing.

receive rewards based on the volume of the business and on the claims ratios of the groups that they sign up.

The importance of incentivizing sales of individual products is seen in the challenges experienced by CIC in reaching targeted policy volumes and retaining business with the Bima ya Jamii product (*see Box 18.3*).

Box 18.3

Creating a dedicated sales force

CIC's Bima ya Jamii product was initially sold by staff at the MFI or SACCO. There were no incentives for individual sales staff and selling insurance products was not the core responsibility of the staff. Sales of insurance products were not therefore given priority, resulting in low premium volumes. CIC is addressing this issue by setting up an agency force responsible for the sale of individual products and introducing commission for the agents. Individual incentives increase the cost of distributing the products, but seem to be necessary to reach the required policy volumes.

Client satisfaction and building relationships with the community

Client satisfaction and maintaining high levels of service are important to maintaining business volumes:

- Old Mutual makes a commitment to pay a claim within 48 hours of receipt of all documentation. The agent assists the beneficiary in gathering and submitting the necessary documentation. Maintaining customer satisfaction through the additional services provided by the agents is important in the competitive South African funeral insurance environment.
- The quality of the treatment provided by the hospital network is important for ICICI Lombard's health insurance product and the cashless benefit allows for a more efficient claims process (*see Chapter 6*).
- Old Mutual and ASR provide initial and on-going training for agents on products to maintain a high standard of customer service. This training has cost implications for the insurer and is one of the reasons for the salaried agent model having been an expensive strategy for Old Mutual.
- ICICI Lombard investigates reasons for cancellations of the health insurance product. ASR conducts surveys to evaluate client satisfaction after the sale of the policy and monitors on-going customer satisfaction and reasons for cancellation of policies.
- Consumer education and awareness programmes can be used to build the relationship with the community. The health awareness campaigns run by the Manipal Group help to maintain a trusted relationship with the community.

18.3.3 Managing claims costs

The risk of higher-than-expected claims can be significant for microinsurance, especially if companies are expanding into markets where there is little previous experience on which to base assumptions on expected claims (*see Chapter 21*). The ratio of the claims to the premiums can give an indication as to whether claims are higher than assumed by the insurer when the product was priced.

Table 18.6

Gross claims ratios

Insurer	Product	2009 (%)	2008 (%)	2007 (%)
CIC, Kenya	Bima ya Jamii	15	7	4 ¹
	Credit life	5	8	5
ICICI Lombard, India	Manipal Arogya Suraksha	110	109	110
	Weather insurance	77	75	115
Old Mutual, South Africa	Group funeral	65 to 75	80 to 90	90 to 100
ASR, Guatemala	Life cover	32	38	2
	Student cover	31	11	
Malayan, Philippines	Microinsurance business	18	27	13

¹ The Bima ya Jamii product and the ASR microinsurance products are relatively new initiatives begun in 2006 and 2007. The small claims ratios in the first year are very probably due to unfamiliarity with insurance and delays in claiming. As business volumes grow over time, it is expected that the claims ratio will stabilize to reflect the risk profile of the lives covered.

The analysis in Table 18.6 shows that claims experience is closely linked to the type of product and the profile of the target market:

- The low claims ratios for the compulsory credit life product in Kenya is consistent with compulsory credit life business.
- The claims ratios are also relatively low for the life products with limited benefits found in the Bima ya Jamii product, the life cover and student cover from Guatemala, and the microinsurance initiatives of Malayan.
- Managing claims ratios for health products is a common challenge in microinsurance. High claims costs do not appear to be related to a specific region, insurer or initiative. The difficulties in managing the cost of claims are demonstrated by the loss-making experience with the health insurance product in India. ICICI Lombard has taken action to improve claims ratios by increasing premiums, negotiating lower treatment fees with the healthcare providers, encouraging enrolment and managing anti-selection. However, to date these efforts have had only a small perceptible effect. Similar experience was seen in the previous bundled life and health insurance product provided by CIC, which

later re-launched this product as Bima ya Jamii with the health risk outsourced to the NHIF.

Insurers employed the following measures to manage claims costs, including pricing for risk and implementing measures and controls to manage claims risks:

Pricing for the risk

Credit life and basic accidental death and disability products are easier to price than health products. This has been the advantage for CIC, ASR and Malayan. Both CIC and ICICI Lombard have had negative claims experience with the health insurance products, which was exacerbated by the difficulty in balancing the demand for higher levels of cover with affordability of premiums.

To price the products, insurers generally used existing experience in similar products from the traditional insurance market and made adjustments for the low-income market. Old Mutual and ICICI Lombard experienced difficulty with this approach (*see Box 18.4*). Claims experience with the group funeral insurance and the MAS health insurance product did not reflect initial estimates. International standards in pricing index-based insurance were used to price the weather product, for which ICICI Lombard received support from the reinsurer.

Box 18.4

Re-pricing risk

Old Mutual's claims ratio has been higher than the target of 60 per cent since inception, at close to or above 100 per cent in 2006 and 2007. This is partly due to the profile of the market, where mortality experience was higher than expected in the initial pricing based on other market segments.

Old Mutual adjusted the pricing for the group funeral cover and introduced differential pricing among groups. It actively monitored claims and adjusted premiums on an on-going basis, providing discounts for good claims experience and increasing premiums in the case of poor claims experience. These efforts resulted in the claims ratios declining to between 65 per cent and 75 per cent. Though these efforts resulted in a decline in premium volumes, they have resulted in the retention of better-quality business.

Implementing measures and controls to manage claims risks

Insurers need to find a balance between setting up sufficient controls to manage risks and maintaining efficiency and low acquisition costs. Insurers utilize similar techniques to manage claims risks to those used for traditional insurance business, including the following:

- **Anti-selection**, also known as adverse selection, can be a significant risk to the insurer and should be managed in the design of the product. This is particularly important as microinsurance products are generally not underwritten and rejection of claims should be minimized to maintain the confidence of the low-income market. The risk of anti-selection on an individual basis is not an issue for credit life, which is compulsory, and the benefit is used to pay the outstanding loan. Nor is there much room for anti-selection in weather insurance as claims are triggered by rainfall measures that are outside the insured's control. For the ASR life cover, the risk of anti-selection is managed through limited selection criteria. Exclusions at the claims stage are used in the case of the student cover product. Old Mutual uses product features like a six-month waiting period and the compulsory nature of the product for all group members to manage anti-selection. The claims experience of the group funeral product seems to have been adversely affected by anti-selection by groups with poorer claims experience. Old Mutual introduced differential pricing based on the claims experience of the group to curb the problem. Anti-selection is a significant risk in health insurance and has been a serious challenge for the MAS health insurance product. ICICI Lombard has attempted to control the risk of anti-selection by targeting a minimum enrolment rate of 60 per cent for each group, but few groups have reached this target. In addition, distribution of the product through the healthcare provider may exacerbate the effects of anti-selection as healthcare providers are likely to have more contact with families that use healthcare services more frequently. Efforts by ICICI Lombard to improve enrolment rates have not yet shown signs of reducing claims ratios.
- **Claims fraud** is managed by working with partners and distribution agents. Old Mutual and CIC rely on group and community leaders as well as partners to validate claims for most products. There are, however, risks if the partner fails to validate claims properly. For the health insurance product Old Mutual, ASR and ICICI Lombard have implemented systems at the insurer to check the validity of claims. The risk of claims fraud is high in health insurance. To manage the risk for their product, ICICI Lombard works only with the Manipal network of healthcare providers to provide treatment for policyholders. The claims team at ICICI Lombard closely monitors treatment protocols.
- **Co-variant risks and reinsurance:** Benefit levels for microinsurance products are small, so the risk of large individual claims is not an issue. Moreover, business volumes for microinsurance initiatives represent a small proportion of the overall business volumes of the insurer for all the products investigated. The insurers have therefore not purchased reinsurance to mitigate claims risk above the minimum amounts required by regulation, with the exception of ASR and ICICI Lombard for the weather insurance product (*see Box 18.5*). Despite the low benefit levels, high levels of claims due to the accumulation of small claim amounts

remain a risk in microinsurance. This is seen in the experience of Malayan, where the higher claims ratio in 2008 is partly attributable to losses due to Typhoon Frank.

Box 18.5

Reinsuring weather risk

The risk of an accumulation of claims due to adverse rainfall conditions is significant for the index-based weather insurance product. ICICI Lombard makes use of a multi-layered reinsurance programme to protect the company from large losses on the weather portfolio. The protection provided by this reinsurance programme is the main reason for ICICI Lombard being able to provide the weather insurance product and it is key to the success of the business line. However, this protection comes at the cost of passing profits on to the reinsurer. With the increasing volume of weather insurance, ICICI Lombard will be in a position to retain a larger portion of the risk of this business.

18.3.4 Managing acquisition and administration costs

Managing the costs of microinsurance is key to creating a viable business whilst keeping premiums affordable for the low-income market.

Table 18.7

Expense ratios

Insurer	Product	Expense ratio			Acquisition cost ratio			On-going administration cost ratio		
		2009	2008	2007	2009	2008	2007	2009	2008	2007
CIC, Kenya	Bima ya Jamii	58	41	35	19	15	16	38	27	20
	Credit life	29	26	27	15	5	12	14	21	15
ICICI Lombard, India	MAS health insurance	16	20	20	9	15	15	7	6	5
	Weather insurance	20	20	20	15	15	15	5	5	5
Old Mutual, South Africa	Group funeral	>40	>40	30–40	30–40	30–40	n.a.	10–20	10–20	n.a.
ASR, Guatemala	Life cover	10	14	7	6	5	1	5	9	6
	Student cover	9	13		6	5		5	9	
Malayan, Philippines	Microinsurance business	35	38	40	32	33	36	3	5	4

Expense ratios for the product lines are summarized in Table 18.7 and key observations include the following:

- Expense ratios are highest for CIC, Malayan and Old Mutual.

- The expense ratios for CIC reflect an allowance for the contribution for corporate expenses that are not directly allocated to a single business unit. It makes sense for the credit life business to be making a contribution to the overall costs of running the insurer, as the premium income from this product is becoming a significant part of its life insurance business. For Bima ya Jamii, the high expenses reflect the significant amount of resources devoted to developing the new product line and building the capacity of partners around the new initiative.
- Old Mutual's group funeral product uses a relatively expensive delivery model of salaried agents, leading to higher expense ratios, which is a significant barrier to profitability. The increase in the expense ratios in 2008 resulted from the increased cost of running the Foundation Market as a separate business unit as well as greater accuracy in identifying the costs of writing the business.
- For Malayan, the high expense ratios are due to the high commissions paid, which have contributed to achieving significant scale.
- The lower expense ratios for the microinsurance products of ICICI Lombard and ASR partly reflect the lower fees paid to partners for the distribution of business and lower management costs attributed to this business.
- The MAS health product and the group funeral product are loss-making before taking on-going administration costs and general company expenses into account. The claims ratios for the MAS health product are above 100 per cent, implying that this product is not contributing towards supporting the expenses of writing this business. The combined ratios for the group funeral product and the weather insurance product are in excess of 100 per cent, indicating that these products are not contributing to the management expenses of the company or to the use of resources to write this business that are reflected in the expense allocation. CIC received a donor grant to develop the Bima ya Jamii product. If the company had funded these costs itself, this product would also have been loss-making over the period investigated.

It should be noted that expenses for the Bima ya Jamii and the group funeral products have been more accurately analysed than for the other initiatives investigated. ASR and ICICI Lombard do not monitor the costs of managing the business at product level, but allow for the management costs of microinsurance by allocating the management costs of the relevant business segment (ICICI Lombard) or overall company (ASR) on the basis of premium volumes. If the costs were more accurately allocated to the other microinsurance products, expense ratios might be higher.

Low acquisition costs

To manage their acquisition and administration costs, insurers have undertaken various strategies. For example, CIC, ICICI Lombard, ASR and Malayan use partnerships to lower the costs of distributing their microinsurance business:

- CIC and ASR work with partners that are effectively the owners of the insurance company. This affords them special concessions in terms of access to the infrastructure of the partners without having to pay fees for these resources, which represents a considerable advantage in keeping acquisition costs low.
- The partners of CIC and ICICI Lombard have also been willing to forgo or reduce fees because there are other benefits to providing insurance to the customer base of the partner. In the case of credit life, the MFIs and SACCOs benefit from having their loan portfolio protected against default due to the death of the borrower. Similarly, the weather insurance protects the lender against default on the loan if the crop fails due to extreme rainfall patterns. The health insurance product offers the healthcare provider a tied client-base where the cost of treatment is covered by the insurer.
- The payment of fees to the partner for distributing and servicing products is common in microinsurance. Even where partners are paid a fee for distributing the product, as is the case for the CIC's Bima ya Jamii product and ICICI Lombard's products, using partners to distribute is still less costly than using an employed agency force solely responsible for selling and servicing microinsurance policies, as evidenced by the higher acquisition cost ratios for Old Mutual.
- Most of the insurers offer individual incentives to the staff of the partner or the agency force for selling and retaining business. CIC recently engaged an agency force to distribute the Bima ya Jamii product. These incentives increase the acquisition costs of the microinsurance business, but are necessary to encourage staff to sell voluntary products.

The acquisition costs for the microinsurers in the case studies also reflect marketing and promotional activities:

- Marketing and promotion accounted for 25 per cent of the acquisition costs for ASR in 2009. ASR and CIC are planning to increase their spending on promotional activities for their microinsurance products.
- ICICI Lombard has increased the involvement of its staff in the marketing of the health product and enrolment of policyholders, but since costs are not monitored on an individual product basis, this cost is not evident in the available financial information. ICICI Lombard has benefited from the promotion of index-based insurance by the Government and the promotion of the MAS health insurance product by the healthcare provider.

- The salaried agency force employed by Old Mutual is a costly distribution model. At present, business volumes do not support the costs of the agency force, but the aim is for the group funeral product to support the costs relating to this product through growth projected in the next two to three years. The salaried agent model was chosen because agents need to be remunerated for servicing the needs of group members, over and above sales. The experience of Old Mutual illustrates the trade-off between managing the costs of the distribution force, and relying on the agency force to build up a relationship with clients and take on some of the tasks involved in servicing the policies.

Efficient administration procedures

CIC, ICICI Lombard and ASR make use of the partner's infrastructure to collect premiums, pay claims, make policy amendments and communicate with policyholders. This has the advantage of reducing the cost of the initiative to the insurer, but relies on the partner's ability to provide quality service and sell or renew policies.

Working with groups rather than individuals facilitates cost reduction and enables Old Mutual to make use of scheme structures to perform some of the policy administration. However, the average group size is relatively small (55 in 2009, 65 in 2008) and the larger groups organized by funeral parlours are necessary to spread the costs of this business.

Simplicity of products, limited levels of on-going policy administration, limited or no underwriting at the policy inception stage and efficient claims payment processes contribute to managing the costs of administering the microinsurance business. By contrast, Old Mutual allows changes to lives covered under the insurance policies on a monthly basis. The flexibility in the product increases the administrative burden for the scheme, the agent and Old Mutual, and adds to the costs of writing this business. This illustrates the difficulty of providing the flexibility that is demanded by policyholders while still keeping the administration costs low.

18.3.5 Cross-cutting factors

Two aspects of initiatives cut across the drivers of profitability: monitoring experience and the organizational structure.

Monitoring experience

All five insurers have devoted resources to this business and have incurred marketing, development, training and systems costs relating to the microinsurance business. However, for the most part, they have not formally monitored these costs. As a result, it is difficult to assess the cost of writing the micro-

insurance business and the financial impact of the measures discussed above. Managing expenses at a business unit or company level permits cross-subsidization in expenses, which allows the microinsurance initiatives access to the broader resources of the company, but does not allow the insurer to accurately assess the profitability of the microinsurance business.

A number of companies assess the profitability of products and business units by allocating expenses on the basis of premium volumes. Where actual expense information was not available, this is the approach that was taken in this investigation (i.e. for all products except Bima ya Jamii and the group funeral product). This gives an indication of how the insurers themselves assess the profitability of the microinsurance business lines. However, it is not ideal since insurers have invested significant resources in developing microinsurance and these costs may not be reflected in proportional expense allocations.

Microinsurance can experience costs that may not be present in traditional insurance, in terms of developing relationships with partners and building the capacity of partners in insurance-related matters. It is therefore important to monitor expenses more accurately to understand the full costs of underwriting this business and to identify deteriorations in experience and take remedial action at an early stage.

All the insurers have ambitious plans to expand microinsurance and devote future resources to this business. CIC is planning to set up a separate business unit, introducing an agency force and a high marketing spend on Bima ya Jamii, which will take a number of years to recover from business profits. ICICI Lombard is devoting more resources from the insurer to work with community groups to encourage higher levels of enrolment for the MAS health insurance product. ASR is planning to begin marketing individual insurance products. All these measures are expected to increase the expense base of the microinsurance initiatives. As business grows and insurers spend more time building and maintaining the business, it will become increasingly important to monitor expenses relating to microinsurance more accurately.

Organizational structure

The organizational structure of the insurer and the position of microinsurance business within that structure affect the costs of managing the business and the support for this business through cross-subsidies from traditional insurance products.

- Microinsurance is not managed separately from traditional insurance for ICICI Lombard and ASR. ICICI Lombard allocates resources across the business at a vertical business unit level (e.g. health business). The costs of microinsurance are supported by premium income from the same type of business where necessary.

The situation is similar at ASR, except that microinsurance is managed under the life insurance department at company level. This provides for an overlap of skills and resources from the overall business units and allows the expenses of the business to be supported by premium income from other business lines.

- The Old Mutual Foundation Market has been set up as a separate business unit to give the necessary level of focus to the market in the development stages. It therefore needs sufficient premium volumes from a variety of products to be sustainable. To date, the group funeral product has generated premium volumes at a level that could make some contribution to the infrastructure and internal management costs of the business unit, but the corresponding costs of distributing the product have limited the scope for this contribution. As a result, the Foundation Market still makes use of general infrastructure, resources and expertise from other business units, which can be important during the early stages of developing a microinsurance initiative.
- Activities relating to microinsurance have previously been undertaken by various departments within CIC. The insurer has now set up a separate microinsurance department, and it will be a challenge to become a self-sustainable unit as currently the micro-business relies heavily on the traditional business for support. It is likely that the microinsurance department will rely on resources from other departments where necessary.

18.4 Conclusions and recommendations

Profitability experience has been mixed for the five different insurers:

- CIC, ASR and Malayan's compulsory credit life products and basic accidental death and disability products are the most profitable.
- Old Mutual and ICICI Lombard are finding it challenging to achieve profitability with the group funeral and MAS health insurance products. Although these insurers have seen a decline in losses on this business following remedial measures, the initiatives are not yet showing profits, as measured in this study.
- In addition, the MAS health product is loss-making from a claims point of view before expenses relating to this business are taken into account. This means that it is not contributing to the expenses of developing and administering the business or general corporate expenses.

The analysis of the factors driving the profitability revealed that:

- Compulsory products and products with simple life benefits that are easier to price have shown profitability.

- Failure to reach scale and control adverse selection have led to high claims ratios.
- Reinsurance has been important for the index-based weather insurance.
- Working with partners can help insurers manage the costs of distributing and administering the business. The Old Mutual salaried agent model had the highest expense ratios.
- Working with partners that have a social motivation can lead to benefits to members exceeding the cover provided by the insurance policies. The Manipal Group provides healthcare awareness campaigns to the community.
- ICICI Lombard has benefited from premium subsidies for the index-based weather insurance product. The subsidies make the product affordable for a higher proportion of the market and have contributed to the achievement of scale in these initiatives.

Obtaining feedback from partners and the market as well as monitoring the financial performance is key to building a commercially viable microinsurance initiative. All the insurers in these case studies actively monitor the claims experience of their microinsurance portfolios. However, most do not monitor start-up or on-going expenses relating to microinsurance separately from the expenses of other insurance business. Insurers need to monitor the total costs to gain a fuller understanding of the performance of their microinsurance business.

The experiences of CIC, ICICI Lombard and Old Mutual show that expansion into microinsurance can be an iterative learning process where costly lessons are learnt through experimentation. This observation illustrates the importance of monitoring experience, continuously learning from the market and adjusting the product and the pricing to improve the viability of products.

All the insurers in this investigation see the vast untapped low-income market as offering a potentially viable business opportunity. Insurers are placing increasing emphasis on the low-income market in their expansion plans. They are devoting resources to building capacity in the market and creating a solid foundation for the microinsurance business. Markets are becoming more competitive and building relationships with partners such as MFIs and rural banks is becoming more important. Despite these efforts, some initiatives have not as yet shown profits and still only cover a small part of the potential market.

While these five case studies provide valuable insights into the profitability of the microinsurance initiatives of the insurers, it would be premature to draw broad conclusions on the profitability of these initiatives and caution should be exercised in applying the findings from these case studies to other contexts and products. Further research into the performance of other microinsurance will be helpful in this regard.

Although this chapter considers only the viability of microinsurance, a complete review should incorporate the initiative's client value proposition to provide a holistic perspective. The question of profitability needs to be balanced with whether products provide value to the client (*see Chapter 15*), because long-term sustainability depends on the value proposition of products. Future research design will need to consider this important issue.

Teaching elephants to dance: The experience of commercial insurers in low-income markets

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In the second half of the 20th century, many commercial insurers in developed markets shifted their focus from the middle class to wealthier clients.¹ More recently in emerging markets however, the pendulum may have been swinging back the other way as some insurers become optimistic about and committed to serving the low-income market with what is broadly called “microinsurance”. Yet these companies – the elephants in the chapter’s title – must generally work to develop the products, processes and instincts to serve smallholders, domestic workers, artisans, market vendors and the like, as few insurers are familiar with the needs and characteristics of this market. Based on the pioneering experiences of early entrants, this chapter provides some insight into getting started.

The formal insurance industry has vast capital resources – money, people, access and experience. The deployment of its resources to benefit low-income households promises to make a great contribution to poverty reduction. Dercon et al. (2008) point out that uninsured risk is a cause of poverty. It is difficult to imagine a more suitable opportunity for insurers to contribute to the betterment of society. Applying core competencies and motivated by medium- and long-term profitable growth, insurers can address some of the vulnerabilities that perpetuate poverty and inhibit economic development. To get there, however, insurers need a degree of change or innovation.

Whether “low-income” means poor, working poor, or emerging middle class can be debated. The overarching practical challenge for a commercial insurer in this unfamiliar market is getting the cost-benefit balance right. Costs include everything required to drive change – from management time and investments to project management and reputation risk. Benefits are most easily summed up as profit, but also include additional value from increased competitiveness through useful innovations and improved reputation.

¹ *Wall Street Journal*, 3 October 2010: “Shift to wealthier clientele puts life insurers in a bind.”

This chapter summarizes the experiences of and recommendations for commercial insurers working to extend their business to the low-income segment. Organized into three sections, the chapter starts with the motives and goals of insurers. The second part discusses the process of achieving those goals within the company, and section three considers the external activities with customers and partners that are needed to achieve scale and sustainability.

19.1 Involvement of commercial insurers in microinsurance

19.1.1 The role of commercial insurers: Potential and challenges

Commercial insurers are increasingly involved in the low-income market and are actively establishing ways to expand their business. Perceptions that the low-income market cannot be insured are being challenged or disproved, and microinsurance initiatives are seen to offer an opportunity to realize the potential of the “fortune at the bottom of the pyramid” put forward by Prahalad (2005). The poor are now considered to be a vast untapped market that aggregates substantial financial resources and has great need, facing risks that are routinely insured in higher-income segments.

Many multinational insurers aim to grow rapidly in emerging markets. Chartis has even rebranded its “Emerging Market” division as “Growth Markets”. Companies like Allianz, Chartis and Zurich have established dedicated initiatives to improve reach to low-income customers. Some national insurers are also engaged in this market segment, possibly because they face competition in wealthier segments or because they are entrepreneurial.

Globally, the involvement of commercial insurers in microinsurance has seen significant growth on multiple fronts:

- **New markets:** A number of international players are expanding their businesses into emerging economies, e.g. Allianz in several African countries, Colombia, India and Indonesia, and Mapfre across Latin America. A significant proportion of business in these countries is expected to come from the low-income market, with some insurers reporting that 20 per cent of their policyholders are microinsurance clients. It is also possible to find examples of commercial insurers playing a role in development-driven initiatives, such as public-sector programmes and corporate social responsibility (CSR) activities. For example, commercial insurers have become involved in the Rashtriya Swasthya Bima Yojana (National Health Insurance Scheme) in India (*see Chapter 20*). Premiums in these schemes are often subsidized by the government or donors to make products more affordable for the low-income market.

- **New entrants:** The market has seen interest from and entry by insurers not previously concerned with the low-income market. For example, general insurers in South Africa, Santam and Mutual and Federal, have developed products providing buildings and contents insurance for low-income households. Because of the regulatory requirement in India (*see Chapter 20*), multinational insurers operating there are becoming exposed to microinsurance and some are beginning to export the lessons learned.
- **New products:** Commercial insurers have expanded their product range beyond credit life (*see Chapter 9*), funeral insurance (*see Chapter 10*) and simple accidental death and disability policies. Other products such as property insurance, index-based crop insurance (*see Chapter 11*), fire assistance and commuter insurance are showing promise (*see Box 19.1*).
- **Innovation in intermediation:** Insurers are taking advantage of advances in information and communications technology (*see Chapter 24*) and opportunities for linking with aggregator groups (*see Box 19.2*) to expand into new markets.
- **Level of competition:** Although first-mover advantage is still very important in establishing a relationship with partners and accessing the market, some markets, such as Colombia, India and South Africa, are experiencing increasing competition for microinsurance business. Group funeral insurance and credit life are highly contested markets, with distribution channels actively comparing quotes, commission and service levels when selecting an insurer to underwrite the cover.

Box 19.1

Increasing diversity of products by commercial insurers

Commercial interest in the provision of microinsurance has resulted in the proliferation of different types of microinsurance products across the globe:

- Kenya Orient Insurance re-launched the Safari Bima product in 2010 providing accidental death, disability and health insurance to commuters.
- In 2008, Mutual and Federal piloted livestock insurance covering small-scale farmers in South Africa.
- Allianz launched a savings life insurance product in India in 2008, attracting three million policyholders and over US\$100m in annual premiums.
- Also in India, Agriculture Insurance Corporation, IFFCO-Tokio and ICICI Lombard are participating in a subsidized weather-based crop insurance scheme for farmers. Having seen the opportunity, more commercial insurers have applied to be part of the scheme for the next cropping season. Reinsurers have also shown keen interest in reinsuring this scheme.
- In Jordan, Zurich launched a hospital cash product marketed as “Caregiver” and distributed by MicroFund for Women, which is affiliated to Women’s World Banking.

Box 19.2

Innovative distribution used by commercial insurers

As discussed in detail in Chapter 22, innovative distribution has been facilitated by the greater availability of partners that commercial insurers can use to access the low-income market. These partners often lead the discussion and approach insurers to establish microinsurance initiatives:

- Mapfre has formed a partnership with CODENSA, Colombia's largest electricity supply company, with approximately two million customers in Bogota. A number of insurance products are offered to CODENSA's clients as part of a customer loyalty programme including funeral insurance, life, extended warranty and personal accident. Products are marketed through a face-to-face sales force and outbound call centres. Sales and marketing channels are administered by CODENSA with support from Mapfre (Smith et al., 2010b).
- In South Africa, Hollard has successfully expanded its relationships with retailers from the Edcon Group to lower-end PEP Stores, and it also distributes through the Best Funeral Society.
- Zurich has experimented in Bolivia and Mexico with pre-paid insurance cards sold at magazine stands and retail stores. In Chile, it has linked door-to-door agents with a utility company to collect premiums, and in South Africa used agents equipped with an application on mobile phones in efforts to improve sales.

Besides business labelled "microinsurance", commercial insurers more frequently reach the low-income market through initiatives called "alternative distribution", "mass market", "group business", "loyalty" or "affinity marketing". While positioning the business as microinsurance can attract new partners interested in a longer-term benefit for their clients, no matter what the initiative is called, innovation or change is frequently required to bring new products through new partners to new customers. It is important to move past labels and to develop a unified strategy for low-income segments to build a business portfolio that is cost-effective in the short term and sustainable in the longer term.

So far, the market has seen both successes and failures in various products and partnership agreements – as is the case in traditional insurance. However, unlocking the economic opportunity in the microinsurance market is a challenge for insurers. The next section discusses the opportunities provided by microinsurance and the "returns" it can generate for the insurer.

19.1.2 Motivations and measures of success

Innovations aimed at effectively reaching the low-income segment incur costs, and therefore a successful microinsurance portfolio should generate returns that justify the investment. The potential returns related to microinsurance fall into three main categories: 1) financial returns; 2) innovation; and 3) reputation. The relative importance of each element will vary depending on the insurer and the level of development of the initiative. However, in the medium and longer term, microinsurance initiatives need to produce financial returns for insurers to continue the business, even if those returns are recognized in other business segments through improved innovation or partnership.

Financial returns

To establish a large microinsurance portfolio at a commercial insurer, profitability must be achieved. Investors require a level of return commensurate to the risk in the business. With greater effort required and more unknowns, microinsurance might require an even higher profit were it not for the corresponding innovation and reputation benefits. Financial viability must be attained within a reasonable period – otherwise insurers will exit the market or impose low limits on their exposures.

Lower absolute premiums mean that large business volumes must be sold to generate profits at a level justifying the effort. Likewise, scale is required to produce real benefits at low cost to microinsurance customers. While the exact number of clients at which a scheme becomes profitable varies according to the cost structure and client conditions, most insurance companies will be hesitant to participate in schemes with fewer than 10 000 microinsurance clients. Since scale may only be achievable in the medium term, it is also important to measure its forerunner, growth.

Microinsurance offers diversification opportunities for commercial insurers. For multinationals, diversifying into new territories, risks and target groups is attractive. Picking up risks in businesses uncorrelated to their core portfolio is particularly useful for improving the insurer's overall risk profile and cash-flow management.

Innovation

Central to the microinsurance discourse is the realization that the distribution channels, products and processes commonly used by insurers underperform in the low-income segment. Consequently, innovation is required, which involves radically reducing costs, increasing efficiency, and making insurance propositions simpler and more straightforward for customers – even if doing so is complex for the insurer.

Insights and competencies gained through successful microinsurance activities can often be transferred to the company's core business over time. Innovations that allow insurance to be sold profitably to a low-income customer at a magazine kiosk or through a mobile phone can be adapted to serve wealthier customers. Insurers have also indicated that lessons learned in making microinsurance more cost-effective can be fed into the wider business, resulting in lower costs for the company as a whole.

Reputation

A good reputation among investors, regulators and the public, and being trusted by policyholders, are important for insurers to access capital as well as to retain and expand their business. Investments and action taken with social objectives in mind have reputational benefits for insurers.

Expanding access to financial services in unserved markets has gained increasing attention over the past decade. Policymakers in several emerging economies are taking the initiative and expanding access to insurance to the low-income market (*see Chapter 25*). "Financial inclusion" has received international attention in the G-20 discussions. Providing microinsurance can allow insurers to build a reputation of contributing to the achievement of wider social objectives, including the Millennium Development Goals.

Microinsurance can also contribute to CSR motives. If a socially committed firm attracts and motivates employees, shareholders and customers, the social promise of microinsurance – improving the lives of the low-income market by providing protection against risks that would otherwise lead to further poverty – indirectly improves the company's results.

Insurers that move beyond the view that social impact and profitability inevitably require a trade-off may be more likely to realize synergies in the development of these goals. From a social impact perspective, for example, profitability is required to mobilize the investments required to reach scale and improve product and service quality for customers. From a profitability perspective, increasing social impact can build long-term demand by improving the standard of living of customers. In the long term, microinsurance needs to create value for clients by protecting them from risks at an acceptable price, whilst at the same time creating value for the insurer by contributing to overall corporate profits (*see Box 19.3*).

*Box 19.3***Zurich's global "emerging consumer" microinsurance practice**

The aspirations and objectives of Zurich's microinsurance practice encapsulate the dual objectives of financial and social return, with the objectives of sustainable financial growth, process and product innovation, and commitment to society by proactively offering Zurich's financial and human resources to address the challenge and promise of greater financial inclusion.

Zurich has started moving away from the term "microinsurance", using "emerging consumer" instead. The company feels it better reflects the customer's needs, which are not micro (at least from the customer's perspective), nor does the prefix "micro" adequately describe the scale of this business. The initiative thus does not see low-income households as "poor", but as ambitious and "emerging" consumers, as evidenced by the growing middle class in emerging markets. Insurance protects assets and income – and emerging consumers have both.

In 2010, Zurich had 2.3 million policies covering "emerging consumers" in seven countries, up from 1.8 million in 2009. Approximately 75 per cent of the volume comes from Latin America, 15 per cent from Asia and the remaining 10 per cent from Africa.

Source: Adapted from the Zurich Financial Services website.

In addition, an important motivation for insurers to become involved in microinsurance is to secure first-mover advantage while the market develops. In this way, insurers intend to build a customer base that will remain loyal and expand insurance product usage as income levels rise.

As summarized in Table 19.1, microinsurance has the potential to provide financial returns and benefits relating to innovation and building the reputation of the insurer. However, initiatives need to be structured carefully to be commercially viable. The next section outlines an approach, first focusing on internal issues, to achieve that success.

Table 19.1

Microinsurance activities of commercial insurers and their measures of success

Example	Key measures of success		
	Profitability	Innovation	Reputation
CareGiver hospital cash product launched by Zurich and distributed through an MFI in Jordan	The product was launched in 2010, but early claims and expense ratios look promising	The product offers unprecedented health cover, including maternity complications; it caters to the specific characteristics of women policyholders (see Chapter 16)	The product has given Zurich and its partner press coverage in leading global media outlets
Allianz launched the Sarva Shakti Suraksha (SSS), a savings life product with MFIs and cooperatives in India	With over US\$100m in revenue and sufficient profitability, the product is being adapted for other markets	SSS is a leading product for savings microinsurance in India and has opened the way to new distribution channels; the insurer has adapted the product for the Indonesian market as well	International media have repeatedly reported on the product and Allianz's cooperation with key partners
Mapfre Brazil's "micro-insurance segment"	Within five years, Mapfre multiplied its revenues to the point where it sells in 20 days what used to take a year	Targeting workers in the informal economy has expanded the potential market exponentially	Attracted the attention of media and development agencies

19.2 Internal organization: Models for success

Developing microinsurance as a viable business for an insurance company may require changing internal structures and processes, sometimes significantly. This section discusses the key steps and changes required, as well as the success factors identified at a number of commercial insurers.

As Figure 19.1 shows, the actual shape, development and timing of these changes will be influenced by factors within the company as well as the regulatory and market environment. Additionally, microinsurance, as with any business initiative, should be underpinned by good business practices – including sound risk management and strong implementation. Continuous monitoring and feedback on the changes can help to implement them effectively.

Figure 19.1

Model to develop sustainable microinsurance initiatives

Environment, regulation and industry practice	1. Securing internal understanding and commitment	Monitoring and feedback
	2. Learning and refining models	
	3. Structuring the business for scale	
	Risk management and good business practices	

19.2.1 **Securing internal understanding and commitment**

The first phase begins by defining microinsurance within the commercial insurer – identifying the company’s motivation, consolidating support and planning first steps. It is necessary to establish indicators of success in the short and longer term at this early stage, which is likely to include a combination of the goals discussed in the previous section. Objectives should be framed around commercial viability in the longer term in order for the initiative to be sufficiently resourced for it to have a chance of success.

As a pre-condition for running microinsurance effectively, senior-level sponsorship and the will to innovate at different levels of the company are essential. The concept of microinsurance is fundamentally attractive: helping low-income customers, capturing emerging market growth, contributing to society and making a profit. However, investing in it requires a deeper understanding and commitment than “love at first sight”. The development of microinsurance business requires managerial attention and allocation of resources in the face of competing priorities. It is important to identify an internal sponsor, who should be an executive with sufficient authority, resources and interest.

Establishing support can be challenging due to perceptions of microinsurance as charity or, worse yet, as cynical public relations. The low-income segment is often characterized as high-risk, unprofitable or even impossible to serve (*see Box 19.4*). This is driven, at least in part, by circular reasoning that concludes that because low-income customers do not buy insurance today, they will not buy it in the future. This reasoning brings to mind the famous observation by the founder of Digital Equipment Corporation that “There is no reason why anyone would want a computer in their home.”

Low expectations lead insurers to fail to make the changes necessary for success. When Zurich in South Africa first offered a microinsurance property cover, management insisted on changing as little as possible “to prove that microinsurance works before we make changes”. Not surprisingly, with no change in the proposition, the customers who did not previously want insurance continued not to want it.

Box 19.4

Mixed reactions from management

Some of the reactions by top managers to microinsurance include:

- “The poor only buy three things: alcohol, cigarettes, and lottery tickets.”
- “Too volatile ... not in my portfolio.”
- “Even if it will be a big thing in 10 years, look around this room ... do you see anyone here who won't be retired in 10 years ...”
- “That might be your definition, but to me, microinsurance is only microinsurance if it is losing money ...”
- “It sounds good ... I suppose you need people, or money, or both ... let's see how we can get them.”
- “Microinsurance is a part, but one has to say a very small part, of our business ... that means, microinsurance is a ‘nice to have’.”
- “Even if it's often in the media ... for us it's a niche business, a side business.”
- “The fastest way to clear the room of anyone who knows anything about insurance is to say the word ‘microinsurance’.”

Source: Internal memos and meeting notes from various companies.

Once key sponsors accept microinsurance as being both commercially attractive and useful to customers' lives, the project will need space to succeed, including human and financial resources, authority and performance targets. It is vital not to underestimate the importance of middle management in this process. Middle managers will often be responsible for the practical decision-making and implementation of the processes required for success in microinsurance. Even with backing from top management, managers and colleagues who work in a certain way and have no incentive to change can present an obstacle to the development of microinsurance within an insurance company.

The two main challenges at manager level are: 1) the nature of microinsurance as an initiative focused on a customer segment; and 2) the structure of incentives for managers. Microinsurance is not a single product, function or process; it is a collection of activities aimed at expanding access to low-income customers. It involves the coordinated efforts of different functions and departments at the insurer. For example, coordinating an approach with both life and general products at most companies involves working with separate underwriting, claims, finance and even human resources (HR) departments.

Regarding incentives, the remuneration of managers responsible for implementation is usually based on short-term growth targets and medium-term consistent results; in this context, the uncertainty and perceived volatility of microinsurance is unattractive. Incentive systems for microinsurance must

therefore be aligned with the higher-level strategy and business requirements. Once a strategy for microinsurance has captured the interest of top management, it needs to be made tangible and concrete to solicit support (or at least to avoid active undermining) among middle managers.

Support for microinsurance can be gained by demonstrating the size of the potential market, highlighting competitor successes, illustrating the social dimension of microinsurance, and exhibiting the learning and innovation opportunities. While this tactic can win the hearts and even the minds of colleagues, it does not replace a proper authority and incentive system.

The insurer may also involve external partners such as development organizations and distribution partners at this early stage. Opportunities to visit existing projects and exposure to real circumstances in emerging markets through these institutions help to create tangible experiences and images of the low-income market and microinsurance. Exploratory initiatives, often supported by donors, have been crucial to demonstrating the market opportunity and business models, creating awareness, and providing material for microinsurance managers to convince their colleagues and management of its potential.

Entering into a long-term, contractual relationship with a respected and patient partner to jointly explore the space can bring internal legitimacy and attention, and secure credible, long-term support within the business. For example, under its global initiative, Zurich worked in partnership with the Swiss Agency for Development and Cooperation (SDC) early on; Allianz and Munich Re have formed similar partnerships with Gesellschaft für Internationale Zusammenarbeit (GIZ); and dozens of insurers have benefited from their collaboration with the ILO's Microinsurance Innovation Facility. While the amounts provided by donors are relatively small from the perspective of an insurer, several microinsurance managers cite the political and symbolic support by public agencies as crucial to catalysing and sustaining internal commitment and support.

19.2.2 Learning and refining models

Creating an open learning culture

As a next step to enter the market, commercial insurers need to devote time and resources to developing skills and capacity, learning about the market, building relationships and negotiating partnerships with relevant players.

Creating a culture of learning about the microinsurance market and a willingness to innovate is important in building microinsurance business. Hollard, a South African insurer that covered approximately four million low-income lives in 2010 (Coydon and Molitor, 2011), attributes its success to its entrepreneurial

corporate culture that creates an open and unbureaucratic approach. Nevertheless, it emphasizes that this does not imply any compromise of basic business principles, and that new ideas need to be backed by a sound business proposition.

Expansion into the low-income market is often an iterative learning process, where initiatives are fine-tuned as the insurer gains experience. A big part of learning is the willingness to get things wrong, whereby new tactics are attempted and failure is tolerated as long as the company learns from the effort it makes (*see Box 19.5*).

Box 19.5

Creating space for errors and learning

At the outset of Zurich's global microinsurance initiative, the Chief Executive Officer (CEO) was asked, "We aim to do some new things and eventually we will 'stub our toe'. Are you ready for that?" He answered, "If the mistake is strategic – we didn't know something that was unknown – I have a lot of tolerance. But I will not tolerate sloppy execution."

Using experiments and pilots

Experiments and pilots are two approaches that form part of the learning process that can be used to refine models.

Experiments are one-off projects with clearly defined hypotheses, meant to confirm that it is possible for the company to achieve its microinsurance goals. As far as possible, the core business should be sheltered from these one-off projects and costs should be limited to the minimum required to learn the results.

Experiments can be invaluable in developing initiatives and learning about customers' needs and preferences, potential partners, local conditions, and regulations without major up-front resource commitments or liabilities. Systems requirements can be kept low with data often being handled in spreadsheets or with readily available software solutions. External funding during this phase may be especially helpful if those who make resource decisions are not rewarded for achieving the goals supported by these experiments.

Clear evaluation criteria for experiments need to be established and the projects regularly assessed against these criteria. By eliminating or clarifying certain variables, initial findings from the experiment stage help to build the case for pilots. Insights from experiments form the basis for the innovation necessary to secure the long-term success of a project.

Pilots to start the business are initiated after experiments provide answers to prove the hypotheses. By the pilot stage, most of the key questions about how the business will eventually work have been answered. While pilots need to be

flexible and agile, they are also the point where more permanent initial investments are made. A pilot is an interim investment to confirm the best methods before rolling out, gaining scale and industrializing. Pilot methods are more flexible than industrialized processes, but more substantial than experiments. The basic shape of the endeavour should be seen at the pilot stage, even if the individual elements are still relatively easy or inexpensive to replace. Like experiments, a strong focus on learning will speed up efforts during the pilot stage.

Pilots and experiments are valuable opportunities for insurers to get things right before going to scale, but due consideration of the impact on all participants is recommended. Experiments create expectations with staff and colleagues as well as with customers and other external stakeholders. Colleagues are often invigorated by the chance to use insurance to do good in society and may even contribute personal time to help. The further an experiment reaches into vulnerable populations, the more important it is to consider the effects on the target customers. Besides the insurer's time and money, low-income customers are asked to invest their time and trust into experiments and pilots.

Box 19.6

Iterative learning process

In Kenya, the experience of Cooperative Insurance Company (CIC), which offers a bundled life and health product that was re-launched as Bima ya Jamii in 2007, illustrates how the development of microinsurance products can be an iterative learning process through changes to the product, risk carrier and distribution model.

CIC began providing the bundled product through selected microfinance institutions (MFIs) and savings and credit organizations (SACCOs) in 2003. Over time, the product was enhanced at the request of the partners with increased benefit levels and options for higher-cost hospitals. The business soon became severely loss-making. CIC then formed a partnership with the Government's National Hospital Insurance Fund to provide the health benefits.

Under this new arrangement, the claims ratio for the life cover component retained by CIC was at an acceptable level, but policy volumes were much lower than expected due to a lack of individual incentives to sell the product for the staff of the MFIs and SACCOs. To compensate, CIC has entered into a relationship with an independent agency to distribute the product through the microfinance intermediaries.

Source: Angove and Tande, 2011.

19.2.3 Structuring the business for scale

Microinsurance initiatives have vast scale opportunities due to the size of the target population and the aggregation potential of distribution channels. With fine-tuning in the pilot phase, the focus will naturally turn to industrialization. When entering into microinsurance with new products, partners and processes, insurers often make use of skills, infrastructure and financial resources from other lines of business at the initial stage of the industrialization. However, this arrangement may not create an ideal fit and can jeopardize the success of the scheme. Iterative learning processes will continue into the industrialization phase as microinsurance initiatives are adapted on the basis of experience and feedback from the market (*see Box 19.6*).

Matching traditional resources to a new business model

Stable systems and processes are required to protect client data and to ensure compliance with underwriting and regulatory standards, and therefore resources are often sourced from the core business. For example, Old Mutual in South Africa created the Foundation Market department to serve low-income households, but until it can achieve scale and generate sufficient profits, this business unit remains financially and technically supported by other departments (*see Chapter 18*).² To achieve scale, a wider group of individuals comprising higher-level managers, technical experts and operational staff need to be involved in developing microinsurance into an established business line. While product pricing may happen on an ad hoc basis for experiments and pilots, technical underwriting and actuarial resources are required when establishing a scalable initiative.

As microinsurance grows, traditional insurance platforms will struggle to operate with the required efficiency and agility (*see Box 19.7*). Low-cost policies cannot support the same expense structures as traditional products. One multinational company in India found that it cost over US\$20 to issue a policy – and that there would be no way to serve the microinsurance target group while carrying such a cost. To profitably reach ever further into the low-income market, products need to be highly cost-effective. To achieve this, some insurers invest a significant amount of time and effort into negotiating cost savings and making operational structures more efficient.

As a result, drawing on traditional business resources may require significant “un-learning” and restructuring. Insurers need to prevent the growing initiative from being strangled by legacy systems and processes, such as inflexible information technology (IT) systems, and the staff responsible for them. Additionally,

² Govindarajan and Trimble (2005) point out that this is the riskiest way to do things, but it is the natural tendency among established firms.

working with external sponsors and distribution partners requires that systems and operations respond flexibly to different partner requirements.

Box 19.7

Microinsurance in multinational insurance companies

Multinational companies offer specific opportunities and challenges for microinsurance. Their financial strength and resources can allow strategic investments into longer-term opportunities and their strong international brands can provide motivation for more speculative investments to produce the social benefits or research for the public good. Additionally, their presence in many countries can help to transfer product and system innovations proven in one setting to others. Microinsurance experts based at head office can contribute to building the global knowledge base, exercise thought leadership, and be a contact point for public or civil society organizations.

On the downside, multinational insurers have plenty of competing priorities, especially in emerging markets. They have also achieved sufficient scale to break processes down into functional departments – gaining a comparative advantage and risk management benefit, but creating barriers to agile adaptation. In companies fractured by product lines, functions (underwriting, claims, sales, IT) and geography, any initiative that aims to serve a new customer will have to either simultaneously coordinate all the elements of the company (in essence, have proxy authority of the CEO) or, more reasonably, change its ambition, or split off, as Christensen (2003) recommends.

Working within the system will bring the budding microinsurance “intra-preneur” no end of interesting learning about his or her company. For example, one South African insurer intended to recruit a three-person team to run a microinsurance field office. In the insurer’s HR system, the lowest possible salary was hard-coded at level zero. For the microinsurance business model to work, the plan was to pay salaries at less than half of the level zero. As a result, the company could not hire the staff directly without changing the company’s entire compensation plan – an obvious non-starter. Instead, the three staff were recruited using an outside agency, reducing their connection to the company and increasing cost.

The emerging experiences of multinational insurance companies that are developing sizable microinsurance portfolios around the world show that it is profitable. To achieve this, and to develop their microinsurance activities systematically, many global insurers have established special teams or units to advance the topic. Some of these teams play a coordinating role in promoting microinsurance, setting quality standards and managing global public relations and media activities. Other companies have a more active approach, with group-level employees that manage local pilots, product development and the acquisition of new distribution partners.

Organizational arrangements

To integrate old resources with new processes, insurers may use different approaches to supporting microinsurance: drawing on existing resources, outsourcing functions, or establishing a separate business unit or joint venture with dedicated microinsurance resources. Naturally, each approach has advantages and disadvantages, as illustrated in Table 19.2, but for companies that are really committed to serving the low-income market over the long term, the “ring-fenced” model appears particularly compelling.

Table 19.2

Various approaches to structuring the business

	<i>Pros</i>	<i>Cons</i>	<i>Example</i>
Coordinating: Drawing on existing business resources, coordinated by a central microinsurance team	Relatively low start-up and overhead costs for microinsurance	<ul style="list-style-type: none"> – Constant tension between traditional and microinsurance business – Access to resources is highly contingent and unpredictable 	<ul style="list-style-type: none"> – Mutual and Federal and Santam manage microinsurance under their New Markets and Emerging Markets business divisions respectively
Outsourcing: Acquiring microinsurance resources externally (actuaries, systems, etc.)	<ul style="list-style-type: none"> – Relatively low start-up costs – Higher flexibility to choose between different systems – Ability to get “proven” solution for systems, etc. 	<ul style="list-style-type: none"> – Limited learning opportunities for insurer – Limited ability to capture long-term value – Reliance on outsourcing partner for innovation projects 	<ul style="list-style-type: none"> – Allianz relies on its partner PlaNet Guarantee to manage microinsurance relationships with various MFIs in African countries (Gradl et al., 2010)
Separate business unit or joint venture (ring-fencing): Building separate division/joint venture with the resources needed for microinsurance	<ul style="list-style-type: none"> – Better accessibility of resources – Greater flexibility to utilize ring-fenced resources in an appropriate manner – Build a microinsurance culture that supports innovative approaches – Develop a sound understanding of the market needs and preferences – Address competition for resources and attention with other business areas 	<ul style="list-style-type: none"> – Higher start-up costs – Need to utilize resources built up fully, loss of short term flexibility 	<ul style="list-style-type: none"> – Metropolitan Life set up Cover2go as an innovation hub outside the headquarters with its own IT system and a mandate to innovate (Smith and Smit, 2010c)

19.3

External outreach: Building market relations

While establishing a solid internal platform, the focus must also include the external environment, particularly the client and the distribution channel. While alternative distribution (*see Chapter 22*) and client value (*see Chapter 15*) are covered in depth in other chapters, this section focuses on the special challenges faced by commercial insurers to industrialize and manage partnerships.

19.3.1 Industrializing: Achieving scale

For microinsurance to be viable, insurers need to reach large numbers of low-income clients cost-effectively, and this involves three components: 1) appropriate products; 2) the sales process and trust building; and 3) the volumes of transactions.

Offering appropriate products

Microinsurance needs to offer a sound value proposition to the low-income market for the business to be sustainable over the long term. Unlike other segments, almost by definition, the microinsurance target market is at best very weakly represented on the staff of insurance companies. Thus, to really understand how a segment perceives risk and the adequacy of existing coping mechanisms, insurers cannot rely on “gut feel”.

Some insurers have successfully worked with community-based partners to understand the market. Feedback from microcredit clients obtained through loan officers has helped Allianz to create better-value products. On the basis of the insights gleaned through this process, Allianz is adding disability cover to its life insurance product in Senegal to cover lost income if the policyholder is unable to work (Gradl et al., 2010).

A key approach to reaching the market on a large scale is to understand existing coping mechanisms and provide corresponding benefits that offer a more enhanced value proposition. Funeral insurance in South Africa is an example of insurers exploiting existing demand for cover when expanding into the low-income market. Informal mechanisms such as burial societies and funeral parlour benefit schemes are common in South Africa. A number of life insurers have seen the opportunity to provide insurance in this market, resulting in a relatively high proportion of the low-income market having formal cover. Forty per cent of adult South Africans have funeral insurance, and the majority are likely to be from the low-income market (FinMark Trust, 2009).

In the case of funeral cover, the low-income market is particularly interested in the actual funeral service and support during preparations for the funeral. Some insurers thus work in partnership with funeral parlours to provide service packages rather than cash benefits to policyholders. Hollard in South Africa is also providing support to the family of the deceased that is traditionally the responsibility of informal burial societies (“helping hands”) at the funeral.³

Benefit design needs to be in line with market expectations. Insurers should not provide cover that is so different from expectations that customers do not trust it. For example, if a policy has benefits that appear “too good to be true”, the cautious buyer will avoid it. Insurers also need to bear in mind the market’s

³ Interviews with insurance managers involved in microinsurance.

preferences to find appropriate ways of interacting with the target group, particularly with regard to technology (*see Box 19.8*).

Box 19.8

Meeting the market where it is

Cover2go, a subsidiary of Metropolitan Life in South Africa, developed an innovative commuter insurance product combining the use of agents at transport centres and mobile phone technology. The product provided personal accident cover of US\$2 140 for a one-off premium of US\$1.40 over a holiday period when a large number of people are travelling. It was sold through agents at the transport centre, with the premium being deducted from the mobile phone credit. Confirmation of purchase of the policy was sent to policyholders via SMS. The research conducted prior to the launch suggested that there was much interest in the product, but very few policies were actually sold. Investigations into the poor sales of the product revealed that:

- Benefits and premiums did not match the market's expectations. The product seemed "too good to be true" and policyholders did not expect such high benefits to be paid.
- Policyholders did not have sufficient mobile phone credit to pay premiums.
- Policyholders were uncomfortable using SMS to provide information and inform beneficiaries of cover; they preferred tangible policy documents.

The Cover2go experience provides important insights into the need to bear in mind the customers' expectations regarding premiums and benefits, and meeting customers where they are in terms of the use of technology.

Source: Smith and Smit, 2010c.

Building loss prevention techniques into the benefit design can be important to cover risks or market segments that were previously considered uninsurable. Encouraging risk-mitigating behaviour also allows insurance cover to be provided at lower premiums, which is important in the low-income market. For example, a livestock insurance pilot by Mutual and Federal in South Africa is linking with agricultural officers to ensure that cattle are branded (for identification when a loss occurs) and dipped (for protection from diseases). This initiative introduces risk management into the insurance process. The farmers benefit as their cattle are protected from diseases and they have access to insurance cover. The insurer can provide cover at more affordable levels because the risk is lower. Working with the community in this

way can be onerous, but the insurer benefits from developing a relationship with the community and gains access to a market that was previously untapped.

Getting the sales process right and building relationships of trust

A relationship of trust is very important in the sales process. This starts by establishing trust with the people selling the product, who may be as unfamiliar with insurance as their customers. On-going communication with the community is also important to assure the market that the insurer understands them. Insurers also need to focus on service in order to retain business. Some insurers have chosen to build a relationship directly with clients through agents. Others, such as India's ICICI Lombard and CIC in Kenya (*see Chapter 18*), exploit the relationships that partners have established with the market. In this case, the reputation of the insurance product therefore relies on the service that the partner provides to customers (*see Box 19.9*).

Box 19.9

Building a cascade of trust

In Senegal, Allianz works in partnership with the MFI CAURIE and PlaNet Guarantee (a specialized microinsurance intermediary – *see Chapter 23*) to provide credit life cover. The MFI's clients need to be confident that the insurer will pay a claim in the future. This is achieved through a “cascade of trust”. There is a mutual relationship of trust between Allianz and PlaNet Guarantee. CAURIE trusts the advice of PlaNet Guarantee, the loan officers trust CAURIE, and the borrowers trust the loan officers.

Source: Gradl et al., 2010.

Many commercial insurers are also taking a longer-term view of investing in the market and are building awareness and understanding of insurance in the low-income market through investment in consumer education campaigns (*see Chapter 14*).

Managing transactions with customers

In time, the transactional scale for microinsurance becomes completely unlike what most insurers handle within their traditional segments. Moreover, existing systems and processes are built for highly customized individual products, whereas microinsurance is mass-produced.

Many insurers are thus exploring new ways to use technology to access the market, increase efficiency and cut costs (*see Box 19.10 and Chapter 24*). Tech-

nology can be useful in administration, keeping contact with policyholders and servicing policies better, especially in the claims process. Major developments and innovations in mobile payments and mobile platforms are encouraging commercial insurers to explore ways of exploiting this technology to achieve scale and lower the costs of acquiring business, administering policies and collecting premiums (Zurich, 2011). Nevertheless, it is a tool for microinsurance rather than an overall solution.

Box 19.10

Using technology

Distribute policies and collect premiums

Cover2go's commuter product and the Safari Bima product offered by Kenya Orient both use mobile phone technology to activate policies and collect premiums, with mixed success – mainly because technology alone does not explain the product sufficiently. Additionally, regulators did not permit the collection of airtime as premium payment. Apart from the problem of low sales volumes, the use of technology in these cases was relatively costly, with the mobile phone provider taking 50 per cent of the premium in the case of the Cover2go product.

Source: Interviews with insurance managers involved in microinsurance.

Risk management

In India, radio frequency identification devices (RFIDs) injected under the skin of cattle make it easier to determine whether the dead cow was insured by Bajaj Allianz, thus significantly reducing potential fraud.

Source: Gradl et al., 2010.

19.3.2 Working with partners and groups

In most of the examples described above, a wide variety of distribution partners (or “sponsors”) are involved in connecting the microinsurance consumer with commercial insurers. Accessing the market is an important area where focus is necessary because traditional distribution mechanisms do not generate sufficient volumes. Developing relationships with distribution partners that have access to a large segment of the market is an approach that has been used successfully by the vanguard of insurers (*see Box 19.11*). The same basic requirements to establish the microinsurance practice within the existing commercial insurer also make

sense when building and maintaining relationships with distribution partners: identify and be clear about motivations, implement through experiments and pilots, and then industrialize.

Box 19.11

First-mover advantage

First-mover advantage is critical in establishing relationships with partners and can secure long-term relationships that allow insurers to build sustainable microinsurance initiatives. Many insurers have long-standing relationships with partners that were established early on in the expansion into microinsurance business:

- The partnership between Sanlam Sky (previously known as African Life) in South Africa and the Zionist Christian Church was established 20 years ago and now covers more than one million lives.
- Also in South Africa, in 2001 Hollard established a joint venture with the Edcon Group, the country's leading clothing, footwear and textiles retailing group. Hollard now offers a broad range of insurance products through Edcon's various retail outlets. Both companies have created a "joint learning" culture with fast and continuous exchange of ideas that is difficult for competitors to match.
- Since 2003, ICICI Lombard has had an index insurance programme in India with BASIX, a holding company for a range of for-profit and non-profit entities involved in livelihood promotion, including microfinance and business support services, and reaching more than three million low-income households.
- Zurich Bolivia began offering voluntary cover through the world's first commercial microfinance bank, BancoSol, in 2003, and continues to write business through the account.
- AIG formed a number of successful partnerships including Casas Bahia in Brazil, Bank Rakyat Indonesia and the microfinance network FINCA in several countries.

As illustrated in Boxes 19.11 and 19.12, potential partners can take many forms: church groups, retailers, banks, post offices, utility companies, MFIs, SACCOs, agricultural cooperatives, workers' associations and trade unions, and affinity groups such as sports clubs. Many insurers make use of existing relationships of trust between partners and the target customers by obtaining the support of the partner or group leaders to endorse, co-brand or even label the product. In insurance vernacular, these sponsors often fall within direct marketing or partnership programmes. The fact is that consumer goods reach every corner of the planet while financial services do not. IFFCO-Tokio's accidental death and disability product distributed with bags of fertilizer in India gives an inkling as to what is possible. From the industry's viewpoint, such partners are considered alternative distribution; but from the customer's perspective, the corner market and the mobile phone operator are their trusted providers.

Box 19.12

Hollard's partnership philosophy

Hollard is recognized as one of the most innovative insurance groups in South Africa. Hollard's partnership strategy has been key to the growth of its microinsurance business. This partnership philosophy focuses on "recognizing like-minded partners, understanding respective strengths and then driving long-term value through optimized structures to ensure mutual success".

Hollard has built relationships with a variety of partners:

- low-income focused retailers such as Jet and PEP stores, which offer funeral insurance and other products
- microfinance providers such as Bayport, Blue Financial Services, Opportunity International (Mozambique), Beehive, and the Savings and Credit Co-operatives League (SACCOL), where credit life insurance and funeral insurance is available
- providers of legal services such as Legalwise
- affinity groups such as the football club Kaizer Chiefs
- direct marketing agencies, such as Amway in India
- low-income groups such as unions (South African Municipal Workers' Union) and burial society groups (South African Federation of Burial Societies)
- mobile telephone companies, such as MTN Ghana (*see Box 24.7*)

Source: Adapted from the Hollard website.

Realizing value from partnerships

Working with partners allows the insurer to extend the existing relationships, infrastructure, physical footprint and contact points that the partner has with the low-income market. This facilitates the sales process, efficient collection of premiums, communication with policyholders and payment of claims. The partner may perform some functions on behalf of the insurance programme such as the administration of policies and premium collection, especially if it already has systems for collecting money from customers (see the Aseguradora Rural example in *Chapter 18*). Insurers may even work with several partners that perform different functions, for example, one partner to sell and distribute policies and another to administer the business.

Working with partners can also encompass developing and implementing improvements to microinsurance initiatives. Partners, which usually have more direct contact with the market, can provide valuable feedback to the insurer on benefit design, operational processes and customer satisfaction. Active partner participation and ownership seems to produce better results, but places more pressure on the insurer to demonstrate and deliver value. Insurers that fail to respond risk having to shelve or redevelop products if partners are not satisfied.

Trust in the provider of insurance is important; however, it is often the partner that has the relationship with the client. The insurer must therefore ensure that the partner has a good reputation and is trusted by the market before entering into a cooperation arrangement (*see Box 19.13*).

Box 19.13

Image and reputation of partners

Metropolitan Cover2go formed a partnership with *spaza* shops, small informal retailers in the local communities, to distribute funeral insurance. Although these local retailers were easily accessible to low-income households, the insurer eventually learned that they had a fly-by-night image and the target market was reluctant to purchase insurance from them. The insurer later entered into a relationship with a national retailer; although these outlets were less accessible to the market, the national retailer had a more trusted brand and stable image in the market, and greater success with sales.

Building and managing partnerships

As illustrated in Chapter 22, there are numerous potential partners through which insurers can gain access to the low-income market. The challenge lies in finding them and negotiating a relationship that works best for both the insurer and the partner.

To start building a relationship, insurers need to select partners that have the best fit with them and can perform the required functions. It is wise to be aware of motivations and expectations from the outset, and to be cautious where these are different for the partners. The partner should provide access to the intended target market, and/or be able to deliver other services that the insurer needs. The partner also needs to be a good match for the insurer operationally and from a systems point of view. A number of the risks can be mitigated through a solid due diligence and selection process up-front, and by involving the partner in the product development process (*see Box 19.14*).

Box 19.14

Importance of creating full buy-in at the partner level

A South African insurer partnering with a church group hit a snag at the initial stages in marketing its household buildings and contents product to church members. The insurer developed an elaborate marketing campaign for the product, but failed to involve the partner in its development. Church leaders refused to allow the insurer to roll out the marketing campaign. Although the product was endorsed by the church leaders, it was not actively marketed initially. Consequently, it has taken longer than anticipated to reach the targeted volumes.

Partnering arrangements are most successful when the relationship offers an attractive value proposition to both parties. The interests of insurer and partner need to be aligned in the sale and servicing of the products, and incentives should be structured to facilitate this alignment. Structuring the arrangement so that there are benefits to the partner besides commission revenue has contributed to the success of some insurers in the market, for example by increasing the utilization for healthcare providers and funeral parlours (*see Box 19.15*).

Box 19.15

Partnerships and products responding to partner needs

Developing products that specifically address the needs of a distribution partner can help to convince partners of the benefits of collaboration:

- **Credit life**, a typical entry-level product, pays off a loan if the borrower dies. It is normally sold through microfinance institutions, and directly improves the risk profile of these organizations. Increasingly, it also pays a benefit to the borrower's survivors and perhaps provides other benefits as well (*see Chapter 9*). Covering these risks is intended to make borrowers more confident in taking the loan and lenders more ready to make loans.
- **Weather insurance** covers risks from adverse weather, such as too little or too much rainfall. When it is coupled with the sales of inputs – such as seeds or fertilizers – it can help producers of these inputs to increase their sales to small-scale farmers wary of weather risks. For example in Kenya, the Syngenta Foundation is promoting an indexed insurance product for corn and wheat underwritten by UAP, a local insurance company, and distributed by agriculture input suppliers (*see Box 24.3*).
- **Property insurance** covers the continued use of specific items of property. A product offered by Zurich in Indonesia, in collaboration with the multinational cement company Holcim, is coupled with building materials for low-income houses and gives clients more confidence in the quality of the housing.
- **Health microinsurance** is often offered together with healthcare providers, which benefit from more stable incomes and improved client demand. For example, in the partnership between ICICI Lombard and the Manipal group of healthcare providers described in Chapter 18, Manipal benefits by gaining access to a client base that is required to make use of the group's hospitals for their treatment.

Developing such products requires high levels of flexibility on the part of the insurer, and the willingness and resources to get to know the priorities of partner organizations before developing the product.

Source: Angove and Tande, 2011; Interviews with insurance managers; Syngenta Foundation website.

Addressing partnership risks

Given their importance in accessing the market, establishing trust, and managing key insurance processes, it is critical to identify and control the risks involved in working with partners. They are not unique to microinsurance but worth noting:

- **Over-promising and under-delivering:** Working with alternative distribution partners requires investment by the insurer and the partner. Insurers are typically unfamiliar with selling through non-insurance entities and these entities do not usually have much experience selling insurance. As partnerships can be time-consuming to negotiate, there is a lot of time to build expectations, which can cause a rush to launch once the partnership has finally bedded down. The importance of testing processes and training frontline staff should not be underestimated.
- **Duration and flexibility of agreements:** The more ambitious the initiative, the more critical it is to have sincere commitment to work together over the long term.
- **Fraud** can be an issue at the partner level, perhaps by failing to remit premiums to the insurer or colluding with policyholders to submit false claims. While insurers have established mechanisms to avoid or reduce fraud, these need to be adapted to deal with fraud at the multiple levels of such a scheme.
- **Non-compliance with regulation:** It is important that the partner comply with all insurance and other regulations relating to the services that it provides to and on behalf of the insurer. This includes regulations relating to intermediaries and sales of policies. While new microinsurance regulation in some jurisdictions (*see Chapter 25*) allows flexible ways of working with partners, it normally creates responsibilities for insurance companies to ensure, for example, proper training of agents and processes to avoid mis-selling by the partner.
- **Failure to deliver:** Relying on partners for the distribution and servicing of products can become a problem when these partners fail to perform functions as agreed. Zurich Bolivia and Prodem terminated their partnership after two years due to the failure of the MFI to give priority to sales, resulting in low policy volumes (Churchill and de Grandchant, undated). CIC in Kenya faced similar difficulties distributing its voluntary Bima ya Jamii product via MFIs and SACCOs (*see Chapter 18*).

These risks could affect the reputation of the insurer among existing and potential customers, investors, regulators and other stakeholders. Risks to the reputation of the insurer are mitigated by the alignment of interests between the partner and the insurer. The partner also needs to maintain a good reputation with customers to retain their business. Risks can be addressed through better training of the partner's staff, structuring incentives around the sale and servicing of policies, and careful monitoring of the quality of service provided by the partner.

19.4

Conclusion

Involvement of commercial insurers in the microinsurance market is growing at a rapid pace. Given the nature of the insurance industry, commercial insurers are well placed to contribute to developing microinsurance into a global sustainable industry and expanding access to insurance for the low-income market. The vast untapped market offers a clear opportunity for commercial insurers to expand their business profitably for themselves and their customers, but to do so, it is useful to consider the following recommendations:

- **Balancing objectives:** Products driven purely by profit motivation and disconnected from any consideration of customer needs would be provocative at best in a business aimed at low-income households unfamiliar with insurance products. Social objectives are perceived to be a good motive, but also often fail to achieve scale in a commercial venture as they are not reinforced or aligned with company incentive and measurement systems. Placing undue emphasis on either objective limits the degree to which a commercial insurer can engage the broadest variety of business partners. Successful insurers strike a balance between the financial, innovative and social objectives of microinsurance in order for the business to grow in the short term and to be profitable in the medium and long term.
- **Giving yourself permission to innovate:** Success is achieved through an iterative learning process where initiatives are fine-tuned over time on the basis of performance and feedback from the market (*see Chapter 21*). Insurers need to make a committed investment and to try new things in developing the business line, while still maintaining sound business practices. Insurers also need to bear in mind the longer-term prospects of achieving commercial viability, reaching scale and building a stable microinsurance market when developing strategies and structuring microinsurance initiatives.
- **Failing to learn, learning to fail?** In microinsurance, as in all innovations, failure can come in many forms – and result in financial losses for an insurance company or in a social performance that does not meet the expectations of the insured. Measurement of performance against the goal is critical and needs to be objective. Companies should structure their projects to shield the core business from the effects of experimentation and to learn the appropriate lessons as quickly as possible. While large companies have sufficient capital to make some mistakes, if they do not learn from those mistakes their commitment will fade.
- **Learning and adapting locally:** Insurance for the low-income market is largely dependent on local factors, i.e. risks faced by the market, availability of partners and insurance regulations. Growth is likely to be achieved through the success of local initiatives. Success in the microinsurance market is therefore more like a small trickle of successes in individual initiatives, rather than a break in the dam wall where a single innovation changes the face of microinsurance for

commercial insurers. A portfolio of smaller initiatives can outperform substantial investment in any single effort when aiming for innovation.

- **Learning and replicating:** On the other hand, core processes, products and even partners provide enormous opportunity for multi-market replication. Success factors may be applied in different contexts but are likely to be implemented differently depending on local conditions. The challenges of scale, access, data scarcity, and even sales techniques are entirely common to most if not all countries and regions, giving a distinct learning advantage to an insurer able to coordinate or guide efforts across multiple markets.
- **Actively creating and shaping the market:** Microinsurance requires an “ecosystem” around the end-client. Large insurers have the resources and the convening power to bring the different players together. When building sales channels, insurance companies must aim for active participation and co-ownership by the partner – making sure the organization understands the basic principles of the product and supports the creation of a commercially viable microinsurance market. Likewise, insurers can grow exponentially when they learn new methods from their partners.
- **Commitment to creating an enabling environment:** Formal statements by policymakers – such as the G-20 – influence standard-setting bodies. Proactive and inclusive regulatory approaches are being developed in many emerging markets in order to support the expansion of microinsurance. The Access to Insurance Initiative, the International Association of Insurance Supervisors and international development agencies are actively working to establish an enabling environment for microinsurance. Keeping abreast of these discussions, or even engaging in them, can aid development of a more inclusive insurance sector.

State and market synergies: Insights from India's microinsurance success

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India is the global leader in microinsurance innovation. The Indian context brings together a number of factors that contribute to improved risk management for low-income households by effectively governing the intersection between financial inclusion in the insurance markets and the extension of social protection to workers in the informal economy, including:

- **Public investment in safety nets:** At 2.1 per cent of its gross domestic product (GDP), India's share of public spending on safety nets is higher than most low- and middle-income countries (Weigand and Grosh, 2008). India's economic growth has permitted an expansion in social protection since the mid-2000s, particularly through mass health insurance schemes.
- **Public-private partnerships:** To support the extension of insurance coverage to populations below the poverty line (BPL), the government has contracted both public and private insurance companies to manage state-subsidized schemes.
- **Incentivizing through subsidies:** India's central and state Governments have subsidized some insurance products to support productive activities by low-income households, making them more affordable, with a particular preference for agriculture and livestock.
- **Quota-driven innovations:** Insurance companies are required by the Indian Insurance Regulatory and Development Authority (IRDA) to originate a percentage of their portfolio in the "rural and social sectors". Servicing these markets required new approaches, leading to significant innovations.
- **Microinsurance regulations:** In 2005, the IRDA promulgated the "Micro-Insurance Regulations", which reduced the certification requirements to be a microinsurance agent and defined a microinsurance product. This facilitative regulation legalized alternative delivery channels to enable insurers to diversify their distribution methods.
- **Large government-owned insurers:** Despite the rapid growth of private insurance companies, the market is still dominated by large public companies with a mandate and infrastructure to assist the poor.

- **Active aggregators:** Approximately 90 per cent of the labour force is employed in the informal economy or the “unorganized sector” in India. However, there is in fact a high degree of organization in the unorganized sector, through non-governmental organizations (NGOs), microfinance institutions (MFIs), self-help groups (SHGs¹), cooperatives and other aggregators. These potential intermediaries are often positively disposed to insurance, and some even carry the risk themselves outside the purview of the insurance supervisor.
- **Large low-income market:** Out of a total population of 1.3 billion, 42 per cent of rural and 26 per cent of urban households live below the poverty line (Tendulkar et al., 2009). These households, as well as economically active rural households above the poverty line, provide insurers with a huge potential market and the prospect of achieving economies of scale.

The convergence of these factors, all in one very large country, creates a dynamic environment for the development of microinsurance. Section 20.1 provides an overview of the general and life insurance industries in India, particularly with regard to their outreach to the rural and social sectors. The second section considers specific product innovations that have enabled livestock, agriculture, life and health insurance to become relevant for low-income markets. Section 20.3 describes the channels commonly used to distribute insurance to the poor. The chapter concludes by summarizing key factors that have contributed to the development of microinsurance in India, which might provide insights for practitioners and policymakers interested in extending social protection and enhancing financial inclusion in other countries.

¹ A self-help group (SHG) is a village-based group usually composed of 15 to 20 local women. Members make small regular savings contributions over a few months until they have enough capital to begin lending among themselves. SHGs are common in India because they have been promoted by the National Bank for Agriculture and Rural Development (NABARD). Through NABARD's SHG-bank linkage programme, SHGs with a track record of regular repayments with their own capital can access additional funding from banks with re-financing from NABARD. NABARD estimates that there are 2.2 million SHGs in India, representing 33 million members, which have taken loans from banks under this programme. This figure does not include SHGs that have not borrowed from banks (Annual Report NABARD, 2011).

20.1

Industry overview

In 1999 the IRDA, the newly formed regulator, opened up the previously nationalized insurance industry to private insurers and foreign investment. Consistent with the requirements for public insurers, the IRDA obliged all private insurers to have a certain percentage of their portfolios in the rural and social sectors, using the logic described by the then Chairman of the IRDA as “forced familiarity” (*see Box 20.1*).

*Box 20.1***Rural and social sector obligations**

The IRDA issued the “Rural and Social Sector Obligations” notification for all insurers in 2002. The obligations require life insurers to originate 7 per cent of the total lives insured from the rural sector, increasing annually to 16 per cent by the fifth year. For general insurers, the rural obligations start from a target of 2 per cent of their insured premium in the first year, rising to seven per cent in the tenth year. Social sector targets for all insurers begin with 5 000 lives insured in the first year and progressively rising to 55 000 lives in the tenth year of operation (IRDA, 2008).

According to former IRDA Chairman Rao, this “forced familiarity” with rural business will encourage insurers to discover profitable business models to serve this market segment, and in subsequent years they will voluntarily increase their investment and expand outreach to low-income households. Although some insurers see their obligations as a cost of doing business, others have validated this argument by regularly exceeding their rural and social targets.²

Source: Authors.

The Indian insurance industry has experienced significant growth since it was opened up to private companies, with 19 general and 23 life insurance companies starting since 2000. In recent years, the microinsurance portfolio has grown even faster than the insurers’ traditional lines. Not even counting coverage under the Government’s mass health insurance schemes (*see section 20.2.4*), in 2009–10³ an

² In this chapter, the data reported under “Rural and Social Sector Obligations” is used as a proxy for microinsurance, although not all of the rural insurance business is exclusively focused on vulnerable communities. Wherever available, microinsurance data, referring to products registered under the Micro-Insurance Regulations, 2005, is used to further improve assessment of targeting.

³ The Indian fiscal year begins on 1 April and ends on 31 March, so all data is presented mentioning the two years.

estimated 163 million low-income persons had some form of insurance.⁴ This unrivalled outreach has been achieved by a variety of approaches with public and private insurers, and general and life insurers, taking different paths to serve the low-income market.

Aside from regulatory targets, growth has been propelled by the Government's willingness to provide subsidies to promote access to a range of products, as summarized in Table 20.1. While most subsidized schemes address microinsurance challenges, such as the "willingness and ability to pay" and "limited awareness", some subsidies are designed better than others. For example, a fully subsidized premium may not be appropriate as it does not allow user-fees to signal client value, and thus could result in inefficient products and players. Also poor targeting, when subsidized products are available to clients who can afford to pay, crowds out market-based solutions. This applies particularly to the many subsidized insurance schemes distributed through banking networks providing "directed credit", which is subsidized and targeted for specific purposes (e.g. buying livestock) and/or for specific target groups (e.g. SHG members), but in fact is not a particularly effective means of targeting the poor.

The priority targets and the availability of state-funded premium subsidies to private companies have contributed significantly to the development of their rural portfolios. However, these government interventions are not the only explanation for the private insurers' rural portfolios. Some are also keen to have first-mover advantage, building up their brand in the low-income market, recognizing that millions of India's rural poor will not stay poor for long. One of the best ways of distinguishing themselves from the public insurers, who already have strong brands, is through innovations. Those innovations are particularly powerful if they not only help private players to efficiently undertake rural business, but also provide lessons that could benefit the insurers' traditional business lines.

This section highlights some of the key differences between the micro-insurance outreach of general and life insurance companies, primarily using rural sector data as a proxy to assess performance in serving low-income households.

⁴ These are rough estimates based on published data of state schemes and outreach of insurance companies through other models. The outreach mentioned here does not include the estimated 300 million low-income persons covered by mass health schemes, as described in section 20.2.4.

Table 20.1

Making subsidies work

	<i>Natural and accidental death (for SHG members)</i>	<i>Natural and accidental death (for landless labourers)</i>	<i>Livestock (for mortality)</i>	<i>Agriculture (area yield)</i>	<i>Agriculture (weather index)</i>
Scheme	Janashree Bima Yojana (JBY)	Aam Admi Bima Yojana (AABY)	Livestock Insurance Scheme (LIS)	National Agriculture Insurance Scheme (NAIS) Programme	Weather-based Crop Insurance Scheme (WBCIS)
Year of launch	2000	2007	2006	1999	2007
Risk carrier	Life Insurance Corporation of India (LIC)	LIC	Multiple insurers, mostly public	Agriculture Insurance Corporation (AIC)	Initially only AIC, but now multiple private insurers
Subsidy	50 per cent premium subsidy plus scholarship for high school student	Entire premium is subsidized by central Government	50 per cent premium subsidy	Premium subsidies vary by crop and state, up to 80 per cent; funded 50-50 by the state and central Governments Claim subsidy: Aggregate claims exceeding the premium are covered by Government (implicit reinsurance)	Premium subsidies vary by crop and state, up to 80 per cent
Outreach	130 million lives (2009-10)	7 million households (2008-09)	Nearly 1 million cattle (2005-08) in 100 selected districts	19 million farmers (2008-09)	9 million farmers (2010-11)
Primary distribution channel	Banks through SHG-bank linkage programme	Government schemes and credit linkage programme of regional rural banks	State Livestock Development Board (SLDB) and State Animal Husbandry Department (SAHB)	2/3 of insureds are members of credit linkage programme of regional rural banks; short-term crop loan is insured	Primarily credit linkage programme of regional rural banks replacing NAIS in districts where it is offered

Source: Adapted from various sources, available on Micro Insurance Map, 2011. The Micro Insurance Map is a available databank, located at www.microinsurancemap.com, replete with statistics on microinsurance in India, managed by the Centre for Insurance and Risk Management (CIRM).

20.1.1 General insurance companies

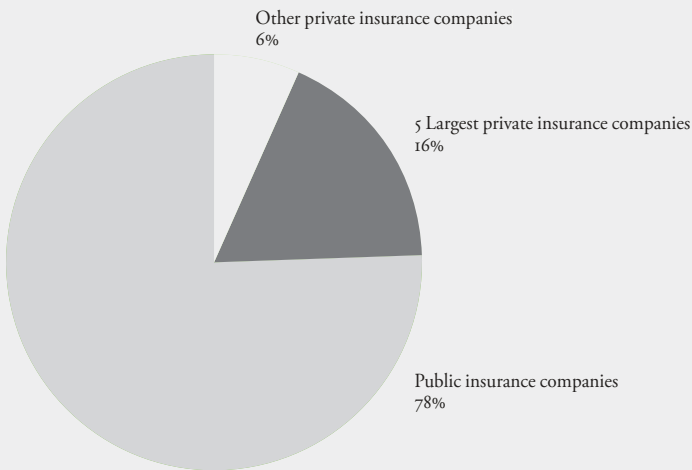
Of the US\$8 billion in general insurance premiums collected in 2009-10, 17 per cent were in the rural and social sector. In 2009-10, ten insurers exceeded their mandated targets, while only one missed its rural target. Furthermore, the rural portfolio grew at a faster rate, with a year-on-year growth of 39 per cent compared to 19 per cent for the overall industry.

With a longer history and higher quotas than the private insurers, the five public insurers are bigger players in the rural and social sectors. In 2009-10, the public insurers – AIC, United India, New India, National and Oriental – had a

78 per cent market share, primarily covering agriculture, livestock and health risks. The five largest private insurers together had 16 per cent of the market. The remaining 14 general insurance companies generated only 6 per cent of the US\$1.3 billion premiums of the rural and social sector (see Figure 20.1). Yet, the private insurers' market share has grown steadily from just under 12 per cent (approximately 4 million risks covered) in 2004–05 to 22 per cent (approximately 13 million risks covered) in 2009–10, indicating that private players are undertaking more rural business even though they lack the rural infrastructure of the public insurers.

Figure 20.1

Total rural and social sector premiums for general insurers (2009–10)



Source: *Micro Insurance Map*, 2011.

20.1.2 Life insurance companies

Life insurance premiums in the rural sector amounted to 2.5 per cent (US\$1.5 billion) of the US\$59 billion of total life premiums in 2009–10. Only one life insurer did not achieve its rural and social mandate, while five exceeded their targets.

As the oldest and largest player, Life Insurance Corporation (LIC), India's only public life insurer, has approximately 76 per cent of the overall life insurance market. LIC is required by the regulators to maintain a special rural target of 25 per cent of its total annual lives insured. In 2009–10 it accounted for 95 per cent of all life microinsurance premiums, attributed to its early market entry, its army of individual agents and more recently, exclusive access to state-subsidized microinsurance products. LIC's deep rural market outreach is rivalled only by the Rural Postal Life Insurance (RPLI) products of the Department of Posts,

which benefits from having the world's largest postal network, including 150 000 post offices.

In 2009–10, LIC's microinsurance products, which are a subset of its much larger rural insurance portfolio, accounted for approximately US\$84 million in premiums.⁵ The next largest microinsurance portfolio is that of Aviva Life at US\$1.9 million, illustrating the state insurer's massive market share. However, the private insurers are expanding as they grow to maintain their compliance with their increasing rural targets and, while today the products registered as "microinsurance" are not the most prominent contributors to this portfolio, they are expanding fast.

An important difference between LIC and the private insurers is their distribution models. While LIC relies on a large network of individual agents, a historical legacy that may not be considered a "good practice" for microinsurance today, private insurers typically offer loan-linked products that reach low-income households through MFIs and cooperatives. SBI Life is different because its rural portfolio can be attributed to the bancassurance model; it exploits the extensive rural infrastructure of its parent company, State Bank of India, the largest commercial bank in the country, to reach the borrowers of the SHG-bank linkage programme. Product distribution is discussed in more detail in section 20.3.

20.2 Products

In recent years, India has seen an explosion of new products covering the priority risks of low-income households. This section highlights some of the innovations emerging in the livestock, agriculture, health and life insurance lines.

20.2.1 Livestock insurance

Approximately 100 million Indians derive their livelihood from livestock, as either their primary or a secondary source of income. Despite this huge market, only 7 per cent of the country's livestock are insured. Raising cows and buffaloes is a riskier livelihood than agriculture because an animal's death causes permanent asset erosion, not just a seasonal loss of income. The livestock economy can be divided into two categories: a) large animals, primarily bovines for milk production; and b) small animals such as goats, sheep and fowl. Few products are available for the latter group, even though small-animal owners often include the more vulnerable communities like nomadic tribes.

⁵ Since accurate data on the rural portfolio of life insurance companies is not available, this estimate is based on the mandated rural portfolio target of 25 per cent of its total portfolio.

Since 1971, the Government has catalysed the livestock insurance market through the Small Farmers' Development Agency (SFDA), which has introduced various schemes for livestock-rearing farmers over the years. Historically, livestock insurance has been offered as a compulsory product, linked to bank loans with a 50 per cent premium subsidy. Voluntary distribution through direct sales has a 10 per cent premium subsidy; however, it has high growth potential considering the emergence of private dairies, prospective aggregators that have an incentive to invest in protecting the livelihoods of their milk-supplying farmers (Sharma et al., 2009).

In 2004-05, approximately 80 per cent of the 7.9 million insured cattle were covered by public insurers, particularly United India, the largest cattle insurer. Despite their market dominance, public insurers have introduced few modifications in product design. Even though the Government allowed private insurers to avail themselves of the subsidized rural credit-linked portfolio, few private insurers attempted to cover this pool. In 2007, after the IRDA removed the restrictions on premium rates, six private insurers entered the livestock insurance market, introducing new products and processes to discover a profitable business.

Even with subsidies, premiums from livestock cover account for less than 1 per cent of the total rural premiums. Besides the challenges summarized in Chapter 12 – which include high transaction costs, fraud and moral hazard – the pricing of livestock insurance is complicated by a lack of mortality data on regional breeds and limited information on the net present value, which is necessary to establish the sum assured. There remains significant scope for improving product design, which is generally limited to one-year terms and linked to loans rather than to cattle productivity phases; the risks covered are limited to the death of the animal; and livestock cover is notorious for cumbersome claims settlement procedures – all of which inhibit demand.

The biggest challenge for livestock insurance is the high claims ratios, often exceeding 100 per cent, which is exacerbated by fraud at two levels. At the client level, for example, when insurance agents provide the owner with ear tags to identify the insured animal, the owner may not tag the cattle, effectively allowing the household to insure the full herd for the cost of one animal. Alternatively, owners may cut the tagged ears of live animals and submit them for claims. The second level involves fraud by intermediaries, including agents and banks. For example, if the loan is used for a purpose other than to buy cattle, bank staff may retain the tag for this “paper cow” and then submit it for a claim in the event of the death of an uninsured animal. Veterinarians may also be an accessory to fraud at either level by providing false death certificates for an additional fee (Sharma et al., 2009).

To control fraud, insurers are experimenting with various strategies. For example, IFFCO-Tokio introduced Radio Frequency Identification (RFID) tags

and corresponding changes to its operational processes to improve the identification of insured animals distributed through cooperatives (*see Box 12.2*). As a result, it has experienced an incidence rate of 0.8 per cent, which is substantially lower than the industry average of four per cent. During a two-year pilot test, only four claims were rejected while 117 claims were settled out of a pool of 15 080 insured cattle. Similarly, HDFC Ergo is testing a range of innovative features to reduce claims. Besides controlling fraud through the use of RFID and photographs, the insurer collaborates in providing risk-reduction services, such as vaccination, de-worming and fodder enrichments, to reduce cattle death and improve productivity (Joseph and Ruchismita, 2011).

20.2.2 Agricultural insurance

Agriculture's share of Indian GDP, while declining, remains significant at around 18 per cent (in 2008) and the sector employs more than 60 per cent of the labour force. The need to protect farmers from risks and irregular incomes has been an on-going concern of national policymakers. India has 116 million operational farm holdings covering 163 million hectares, with a vast majority being small and marginal in size. Approximately 80 per cent of farmers operate in less than 2 hectares, and a significant proportion of such households are below the poverty line (GFDRR and World Bank, 2011). Since only 40 per cent of India's gross crop area is irrigated, farmers are particularly vulnerable to adverse weather conditions, punctuated by periodic news of farmer suicides during drought years. This section first describes area-yield insurance promoted by government schemes and then introduces weather-index insurance, initially piloted by the private sector and now also offered as a government programme.

Area-yield insurance

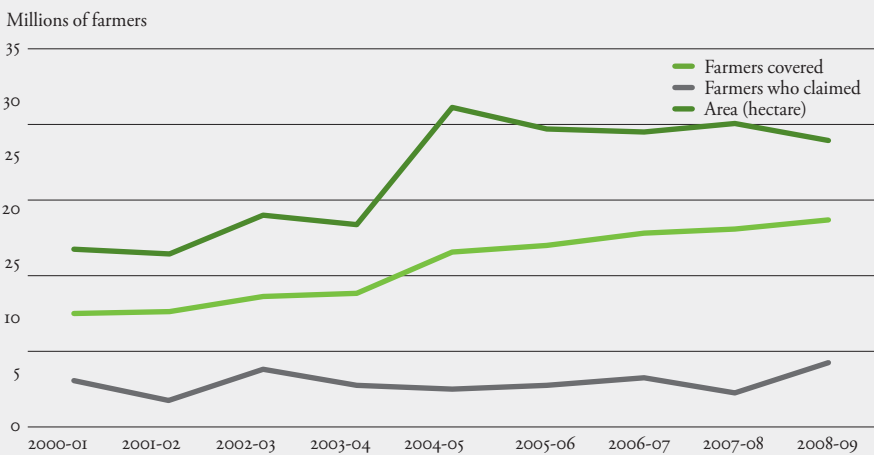
The vast majority of India's farms cultivate rain-fed crops and are particularly vulnerable to the vagaries of the Indian monsoon. During the decade ending in 2009, an estimated 350 million people were affected by drought in India (GFDRR and World Bank, 2011). To protect farmers against agricultural risk, the Government has historically relied on two interventions: a) minimum price support; and b) subsidized crop insurance via area-yield indices. The government-sponsored Comprehensive Crop Insurance Scheme (CCIS) introduced in 1985–86 was replaced by the National Agriculture Insurance Scheme (NAIS) in 1999. Underwritten by AIC, NAIS is usually distributed through rural banks as a compulsory product tied to subsidized crop loans (*see Table 20.1*).

Since farmers plant multiple crops to diversify their risk, NAIS's multi-crop product attempts to insure the farmers' total agriculture income better than CCIS's single crop cover. The NAIS index is based on major individual crop

yields under cultivation in the area, weighted by their acreage. It compares deviations in historical crop yields in that location, and treats all farmers in its defined perimeter as identical in terms of risks and loss. By 2009, NAIS had covered 19 million farmers and 26 million hectares, covering approximately 16 per cent of the cultivated land (see Figure 20.2). The scheme was effective in reaching smallholders: the average premium per farmer insured slightly exceeded INR 400 (US\$9). As for landholdings, the average area insured per farmer has come down from 1.6 hectares in 2000–01 to 1.4 hectares in 2008–09, suggesting that the scheme is covering more small and marginal farmers (GFDRR and World Bank, 2011).

Figure 20.2

Growth of NAIS coverage (2001–09)



Source: *Micro Insurance Map*, adapted from AIC, 2009.

Despite these advantages, a scheme that uses an index, rather than a farmer's actual losses, is subject to basis risk (see sections 4.3.2 and 11.1). Although the index approach is more cost-effective than assessing the loss of each farm, area-yield schemes still involve high manpower costs in undertaking local crop-cutting exercises to measure yield. In India, this measurement is done by government agencies, which reduces the cost for the insurer, but the insurer cannot control the process of loss assessment. The involvement of the additional party also contributes to substantial delays in claims payout (Sinha, 2007).

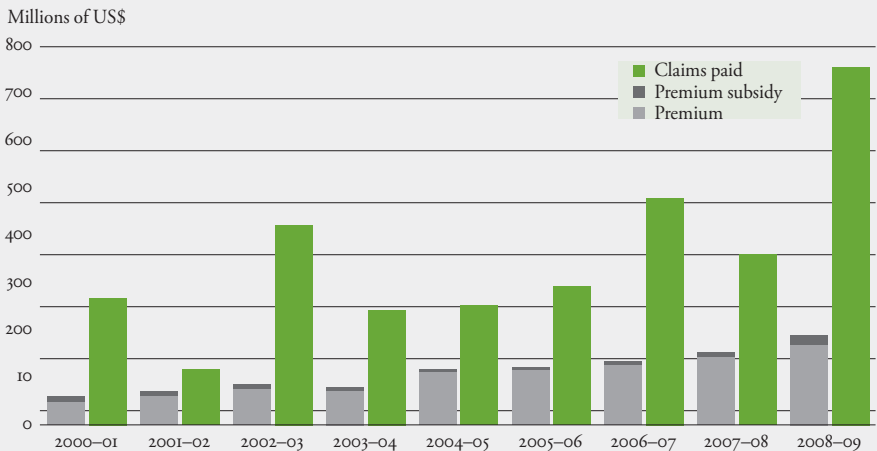
The underwriter, AIC, receives premium and claim subsidies from the Government to keep the product affordable for the farmer. Although NAIS provides limited cover to farmers, the product still has high claims payouts and is inherently unsustainable, as shown in Figure 20.3 – hence the need for implicit reinsurance through claims subsidies from the Government.

While NAIS continues to be the largest agriculture insurance programme, its growth is inhibited by the limitations discussed above. The Government is testing

a new approach, Modified National Agricultural Insurance Scheme (MNAIS), which has key features to make it more relevant to farmers as well as attractive to private insurers. MNAIS is described in Box 20.4 at the end of this section, but first it is necessary to introduce weather-index insurance.

Figure 20.3

NAIS performance (2001–09) (in US\$ million)



Source: *Micro Insurance Map*, adapted from AIC, 2009.

Weather-index insurance

The private sector's involvement in agriculture insurance has primarily taken the form of weather-index cover. As described in Box 4.1, in 2003 the World Bank supported ICICI Lombard and its distribution partner BASIX in piloting India's first weather-index insurance contract, a product that made payouts to farmers based on recorded rainfall (or other weather parameters) instead of actual losses.

The success of the private sector in responding to farmers' specific needs with a profitable business model led the Government to provide subsidies, available to both the public and private insurers, resulting in dramatic increases in product take-up. Nearly two million farmers were covered by WBCIS in 2009–10, which grew to nine million Indian farmers in 2010–11 (Kumar, 2011). Today, India has the largest, most vibrant weather-index insurance market among developing countries.

The evolution of the weather-index market can be described by a review of three topics: 1) contract design; 2) data quality; and 3) distribution models, which provide interesting insights and valuable lessons.

Contract design

An important debate is the trade-off between accurate and complex contracts that are more responsive to farmers' risks, compared to simple, more easily understood products. Before 2008, simpler products were dominant since sales were voluntary

and therefore farmer understanding was crucial. These were very clear contracts, but rarely involved crop-stage specific covers. Crop-stage contracts address the different risks faced during germination, vegetative stage, flowering and maturity or harvesting phase, and allow different covers and payout thresholds for each stage (*see Box 20.2*). It is a difficult choice, as farmers understand simple contracts better, but if they are unable to make claims during bad years, they will lose confidence and are unlikely to renew, which is a strong motivation to invest in contracts specific to crop stages.

Box 20.2

Crop-stage weather tickets

HDFC Ergo, in collaboration with the International Food Policy Research Institute and CIRM, is running a weather-index pilot that attempts to strike a balance between simple, easy-to-understand products, and more accurate but more complex contracts.

In this pilot, weather insurance contracts are sold in the form of tickets that are for specific crop risk phases and clearly state the amount of payout. Using a building block approach, the farmer can choose the amount of cover as well as the crop stage to be covered, allowing flexibility and choice. As the contracts are for shorter risk phases, the premiums are lower and considered more affordable.

For a cropping season, two types of tickets are available for each of the four-month periods. Both tickets have similar benefits but differing probability of payouts. The ticket with a higher payout probability costs INR 352 (about US\$8, equivalent to four days of agricultural wage labour), while the one with a lower probability is available for INR 265 (about US\$6). The first ticket pays in the event of moderate rainfall, whereas the other pays in the event of excessive rainfall, representing severe losses. Both tickets allow a payout of either INR 1000 (US\$22) per acre when the index reaches the “strike” amount of high rainfall, or INR 4000 (US\$88) per acre when the index hits the “exit”. Farmers can choose how severe an event they want to cover, and for which phase, allowing them to build their own cover based on liquidity constraints and risk perception. The process of choosing their own cover creates a better understanding and transparency about when and how an index insurance product works.

About 93 per cent of the contracts sold were high value options. This indicates farmers’ preference for moderate risk covers, which have a higher probability of payouts, even when they have a higher up-front cost. As expected, the sales in the three-cover period were uneven with the highest sales in the second cover period. These buyer choices suggest that a customizable approach could induce greater take-up.

Source: Adapted from CIRM, 2011.

With improved data correlations between crop yield and various weather conditions, India has graduated from its pilot years of single-weather, one-crop covers with comparatively weak crop-to-weather correlations. Now products with multi-weather covers are common, which also allows for the development of contracts with greater precision. In theory this lowers the basis risk for the farmer. However, improved product design may not result in increased take-up because the resulting complexity may place a burden on sales and distribution channels (*see Chapter 13*). For example, the multi-peril weather-index insurance product for rice developed by Weather Risk Management Services (WRMS) was subsequently replaced by single peril covers (temperature and rainfall separately), which made distribution and sales easier, even though it increased transaction costs and limited the risk cover for the farmer.

The other concern with data is timing, where a delay in the receipt of certified weather data by insurers leads to claim settlement delays. Some innovations have tried an immediate interim payout approach based on available data to improve turnaround time. An additional way to improve the process is to transfer data automatically from weather stations to insurers.

Weather-index insurance has also evolved to include a broader range of crops, such as coriander and grapes, and additional weather parameters, such as frost for fruit orchards. Such innovations are also valuable for a limited range of non-agricultural risks, as illustrated in Box 20.3.

Not all product evolution has been positive. For example, there has been a change in claim payment periods, resulting in products with less client value. In the pilot years, claims were settled after each crop phase, but now payouts often come at the end of the season because of the limited financial infrastructure and the high cost of reaching farmers. A key advantage of a weather-index contract should be its ability to make immediate payouts to help farmers pay for alternate remedial measures such as hiring water pumps to reduce actual crop losses. Therefore, shorter payment periods should be retained, with payments made via low-cost cash transfer mechanisms.

Box 20.3

Weather-index for non-agricultural groups

Lac insurance for indigenous populations

With support from the Department of Tribal Affairs, NGOs BASIX and PRADAN, WRMS and ICICI Lombard developed a specific product for tribes producing lac, a natural resin secreted by insects that thrive on specific trees. Lac, a highly remunerative income source for forest dwellers, is used to make jewellery, varnish, dyes and sealing wax.

During their short production cycle, the insect larvae are vulnerable to sudden variations in temperature. The weather index is triggered by temperature variation, unlike other contracts that mostly cover extreme conditions. Claims payout is made immediately to allow the insured to buy more larvae in time for a second crop cycle. It is conceptually similar to a “sowing period seed cover” in an agricultural context, which provides replacement seeds if there is scarce rainfall during the sowing phase.

Salt insurance for salt-pan workers

In another example of non-agricultural weather-index cover, insurers IFFCO-Tokio and ICICI Lombard came together to offer a unique contract designed by WRMS for salt-pan workers. Salt pans, mostly in coastal areas, are fields where brine water is spread by seasonal labourers for drying and salt production. The salt-pan workers are typically landless labourers belonging to lower social and economic groups.

This excess rainfall cover contract is unique because it has zero design basis risk. There is 100 per cent correlation between farmers' losses and excess rainfall since the drying salt dissolves when exposed to rain. Such weather-index contracts have very high value for the client. However, after two years the product was discontinued, even though there was substantial interest from the farmers, after catastrophic losses due to Cyclone Laila. The insurers were unable to aggregate salt producers across the country to achieve scale, so the scheme was not large enough to interest reinsurers.

Source: Adapted from Baidya and Ruchismita, 2011.

Data quality

While the starting point is access to digitized historical crop productivity and weather data to identify correlations and develop the index, the expansion of weather-index cover depends on the creation of reliable data transmission mechanisms for weather measurement infrastructure.

A critical driver of the weather-index market was the access to historical data from weather stations by the Indian Meteorological Department. The majority

of stations were just rain gauges and there has been considerable effort to expand the network of automated weather stations (AWS). The investment in AWS was made by various government departments, such as meteorological, space research and educational institutes, and has also attracted investment from private agencies with incentives to access more accurate data on a wider range of weather phenomena (e.g. wind speed). Future efforts to improve the standardization of the data from public and private sources should improve access to affordable reinsurance.

Instead of relying exclusively on weather stations, IFFCO-Tokio is testing new technologies to build transparency and improve claims settlement time, such as the normalized difference vegetation index (NDVI) to reduce basis risk in weather-index insurance (Patankar, 2011).

Similar to the market-making role of microinsurance intermediaries (*see Chapter 23*), the involvement of WRMS, a weather insurance intermediary, has supported the weather-index market in reaching scale by putting together bulk deals and investing in digitizing data and risk modelling. However, in general, poor data quality and uncertainty regarding the impact of climate change (*see Chapter 4*) are on-going challenges, and lead to high reinsurance premiums that could inhibit the development of better and more affordable products.

Distribution

In the initial years, there was only one insurer (ICICI Lombard) and it distributed weather-index insurance through NGOs and MFIs. This relationship served as a learning opportunity from which various products were designed to provide customized solutions for specific risk groups. Subsequently, scale was achieved by diversifying distribution, for example by working with cooperatives and exploiting the rural outreach of agriculture input suppliers and procurement agencies.

The Government responded to farmers' voluntary take-up of weather-index schemes by offering premium subsidies for such contracts, initially to AIC and then to all insurers. The inclusion of AIC in the weather-index market has been a major driver of scale because it enabled cover to be extended to the captive clientele of the credit-linkage programme. The massive volumes of weather-index cover in India, and interest among private players to collaborate with the Government to offer WBCIS, can be partly attributed to the seamless premium collection and distribution. Rural banks deduct the premium from the farmer's loan and the matching state subsidy is made available in a single transaction, minimizing administration costs for insurers.

Such subsidies, however, are restricted to specific crops in identified districts and are not available to all farmers. This selective provision of insurance is inherently inequitable and influences the cropping decisions of farmers, causing them

to focus on mainstream insured crops. Some of the limitations of the WBCIS may be overcome by the MNAIS (*see Box 20.4*).

Box 20.4

Modified National Agricultural Insurance Scheme (MNAIS)

MNAIS is a hybrid yield and weather-index product, combining AIC's NAIS and WBCIS index schemes, pilot tested in 34 districts in 12 states for the Rabi (winter) season of 2010–11 to overcome some of the challenges associated with NAIS. If it runs successfully, it may replace NAIS and provide small and marginal farmers with better risk cover.

MNAIS is using what is expected to be a more accurate basis for calculating the threshold yield for triggering payouts: the average yield of the last seven years excluding up to two years of declared natural calamity. It draws from both the area yield as well as weather index contracts. The area yield for major crops is measured at village level, reducing spatial basis risk substantially. One of the key advantages of the weather-index aspect of the contract that MNAIS retains is its ability to pay claims during the cropping season, providing immediate relief, allowing the farmer to invest in alternate strategies to arrest crop loss for the whole season.

The product covers “prevented sowing” for 25 per cent of the total sum insured if the monsoon is late and the farmer decides to postpone sowing until the rains arrive. The product also covers “post-harvest” losses for up to two weeks after harvest. Due to limited rural warehouse infrastructure, farmers “cut and spread” the crop in the field for drying after harvesting. A sudden bout of rain could spoil the harvested crop leading to substantial loss.

In MNAIS, actuarial premiums will be paid for insuring the crop and hence claims liability will be on the insurer, unlike NAIS where the State provided claims subsidies. This modification could lead to improved price transparency (where the premium reflects the true risk), and stimulate the use of informed reinsurance arrangements instead of the Government acting as a free reinsurer. MNAIS could also lead to better management of the programme, as the actual losses will have to be borne by the insurer. Premium subsidies will continue to make the product affordable.

This product could expand the outreach of weather-based contracts, catalyse private investment in weather infrastructure, ensure better reinsurance pricing by pooling risk from diverse regions, and generate considerable guaranteed demand to encourage new insurers to offer agriculture insurance. While stand-alone agriculture insurance companies like AIC are critical, greater competition is necessary to serve the huge untapped market at an affordable cost.

Source: Adapted from CIRM, 2011.

20.2.3 Life insurance

India has 32 registered life microinsurance products. Aviva Life has the most products with seven, and LIC, the largest insurer, has four products. The growth in the number of registered products, mostly by private insurers, can be attributed to two factors. First, the longer insurers are around and the more their mainstream portfolio grows, the higher their rural and social sector targets, which puts pressure on insurers to grow through new approaches. Second, since the public insurer has been operating longer, the “low-hanging fruit” have been taken, so private insurers have to try new approaches.

As described in Chapter 8, an increasing number of insurers are supplementing loan-linked life products with voluntary products. Both endowment and term life products are being adapted to household liquidity constraints and product preferences, for example:

- **Composite product:** SBI Life, the largest private life insurer, is pilot-testing a composite product – a life product with covers for hospital cash and critical illness, along with a personal accident and an asset insurance (dwelling and contents) cover to increase client value while reducing transaction cost through integrated delivery.
- **Guaranteed benefits:** Bajaj Allianz works in partnership with rural banks and large MFIs to distribute its voluntary savings and insurance cover. By November 2010, this product had scaled to cover three million lives and generated approximately US\$100 million in premiums, illustrating the customers' preference for savings-based products with features such as a high surrender value, even though the maximum insured amount is low.
- **Unlapsable endowment:** Max New York Life's (MNYL) unique Max Vijay product is a savings plus insurance product designed to be “unlapsable”. To accommodate the irregular incomes of the target market, policyholders can top up their account whenever they have additional funds (*see Chapters 8 and 22*).
- **Short terms:** Birla Sun Life's Bima Kawatch Yojana product, which has a three-year term option, and Tata AIG's Navakalyan Yojana, which provides cover for five years, both allow customers to quickly experience the benefits of their premium payments, instead of having to wait for ten or 15 years.
- **Flexible payment options:** LIC's Jeevan Madhur offers a range of premium options, including minimum weekly payment of INR 25 (US\$0.50), fortnightly INR 50 (US\$1), and monthly INR 100 (US\$2.20). LIC has made use of its microinsurance agents to sell more than 100 000 of these policies in its first year, and has also started distributing through NGOs, MFIs and SHGs. This product has also been customized and offered to a previously excluded group: commercial sex workers, where the cost of the medical examination is borne by LIC.

For life insurance, product design is often less of a challenge than getting the product to the target market, which is covered in section 20.3.

20.2.4 Health insurance

Perhaps India's greatest contribution to the global microinsurance discussion has been in the area of health. This section highlights some of the innovations emerging in the critical function of claims administration, and then introduces the accomplishments of the mass health insurance schemes that are subsidized by the Government.

Towards better claims management

India's active and diverse health microinsurance models developed by mutuals, MFIs and insurers have been widely reported (for example, Radermacher and Dror, 2006; MicroInsurance Centre, 2009). Although these efforts have pioneered affordable health microinsurance in India, they have found it difficult to establish systems and processes to ensure high service quality in claims management and supervision of hospitals (*see Box 20.5*).

The partner-agent model, for example, has achieved scale, but has had problems with service quality. The insurers, as the partner in the model, often worked with a mainstream third-party administrator (TPA) to serve their rural health portfolios. However, the limited rural presence of TPAs and their complex claims management processes did not respond well to the basic health insurance products offered by MFIs. The resulting client dissatisfaction led some MFIs to move away from cashless schemes, away from private insurers or away from the partner-agent model. For example, Bandhan, an MFI with more than three million members, reverted to reimbursement-based benefits when it began experiencing loan defaults due to problems with "cashless" claims processing. Claims management had become cumbersome and faced numerous challenges, including incomplete documentation provided by clients, clients' failure to understand exclusions, and occasional collusion between client and provider.

More recently, new TPAs have started "rural focused" business operations. Also, mainstream TPAs encouraged partly by vast state-supported health schemes have modified systems to serve rural clients better. The capacity of the TPAs should continue to play an important role in helping manage huge volumes of high-quality health insurance contracts.

Box 20.5

Bringing in the absent TPA

With limited on-the-ground monitoring and servicing controls, insurers typically rely heavily on third-party administrators to evaluate and settle claims, and carry out controls to detect padded invoices and outright fraud. The TPAs' complicated processes and higher overheads, however, were not originally geared to the microinsurance market, and the resulting claims rejections led to client dissatisfaction.

Because of the difficulties with TPAs, when agents like MFIs and NGOs offered health covers underwritten by insurers, they often built in-house administration capacity or used the insurer's systems for TPA-like services to improve servicing ability. These efforts required investment in customized processes and IT systems to manage the volume of business and to align the systems of the agent, insurer and the healthcare facilities. However, the partner-agent model did not create financial incentives for the NGO or MFI to facilitate better claims servicing or investing in fraud control.

In contrast, the mutual model encourages the scheme to monitor claims and ensure better servicing as the financial benefits of fraud control and high re-enrolments are retained. Some MFIs have switched from the partner-agent to the mutual model to improve claims servicing and cater to their members' specific product needs. Here are a few examples of how players addressed the "missing middle" of claims administration:

- **Carry the risk in-house:** The MFI Grameen Koota moved from working with mainstream insurers to cooperating with a service partner, SAS Poorna Arogya Healthcare, to provide TPA services to its members and manage it as an in-house health insurance scheme. Similarly, the NGO SHEPHERD moved from the partner-agent to the mutual model, with assistance from the mutual "insurer" Uplift. By carrying the risk, both organizations have more incentives to manage claims effectively.
- **Outsource to a trusted administrator:** The MFI SHARE worked with Micro-Ensure in specific locations to handle its data management requirements with the insurer.
- **In-house administration:** NGOs BASIX and Sri Kshetra Dharmasthala Rural Development Programme (SKDRDP) built in-house technology to manage TPA-like operations to facilitate seamless integration of systems with the insurer and allow better-customized products and servicing. They are also providing these services to other organizations.

Source: Authors.

Mass health insurance schemes

What is particularly interesting about health microinsurance in India is the emergence of state-driven mass schemes. These schemes are considered under the broad heading of microinsurance because several of them involve some sort of user fee, and they are often implemented by the insurance industry through public-private partnerships. Furthermore, the design of the schemes has drawn considerably on the experiences of the mutual and NGO-based health microinsurance.

From 75 million people covered under such schemes in 2007, it is estimated that 302 million people had health microinsurance in 2010.⁶ Three of these schemes – Aarogyasri in Andhra Pradesh, Kalaighar in Tamil Nadu, and the national Rashtriya Swasthya Bima Yojana (RSBY) programme – reportedly insured 54 million families by the end of 2010 (PHFI, 2011). Backed by political will and the ability to aggregate huge numbers, these schemes are transforming health microinsurance by addressing key challenges such as data creation, investment in identification technology and setting industry standards for healthcare provision.

Figure 20.4

Chronological evolution of pro-poor mass health insurance schemes in India

Scheme	Yeshasvini Cooperative Farmers Health Care Scheme	Weavers' Insurance	Rajiv AarogyaSri Community Health Insurance Scheme	RSBY	Chief Minister Kalaighar Insurance Scheme for Life Saving Treatments
– Location – Year started – Outreach	– Karnataka – 2003 – 3 million lives	– Multi-state – 2005 – 6.4 million lives (1.6 million families)	– Andhra Pradesh – 2007 – 70 million lives (20.4 million families)	– National – 2008 – 63 million lives (23 million families)	– Tamil Nadu – 2009 – 35 million lives

Figure 20.4 illustrates the timeline of the major schemes and their current outreach. While the first mass health insurance scheme, Yeshasvini, started by the Karnataka Department for Cooperation in 2003, has been an inspiration for the later schemes, most of its features remain unique. It has no risk carrier and is managed as a health fund through a TPA. It is a voluntary product with a premium contribution from the members. In contrast, the Weavers' Health

⁶ These numbers seem optimistic and may be assuming larger family sizes. Based on an analysis of RSBY, Krishnaswamy and Ruchismita (2011) calculate that there are on average 2.7 persons per family for each card issued, whereas the estimate by the Public Health Foundation of India (PHFI) seems to assume the average household size is larger.

Insurance Scheme launched two years later by the Ministry of Textiles for poor handicraft artisans is managed by insurers. The Weavers' scheme is unique because it includes outpatient cover, while the other mass schemes primarily cover hospitalization.

The key features of RSBY, Yeshasvini and the two state schemes are summarized in Table 20.2. The differences between the two state-funded programmes, Aarogyasri and Kalaigarnar, are attributed to the health status of each state, suggesting that the product design is customized to respond to regional requirements. Aarogyasri in Andhra Pradesh initially provided a hospitalization cover, but over the years its package expanded to include critical illness. Kalaigarnar, on the other hand, operates in Tamil Nadu, which has a more robust and functional public health infrastructure, and consequently it only needed to cover critical illness.

Yeshasvini invests less in identification technology, but all schemes rely heavily on electronic data collection and transmission and have fairly robust management information systems (MIS). With the exception of Aarogyasri, the schemes have few human resources allocated to monitoring and supervision. RSBY and Kalaigarnar use biometric cards to control fraud; RSBY issues real-time health cards (at the enrolment camp) to improve customer service and control any rent seeking behaviour by the card-issuing agency (*see Box 20.6*). There is a marked variation in the average cost of hospitalization, which can be attributed to four factors: the type of medical risk covered, the profile of households targeted, the rising healthcare costs in the region, and the scheme's ability to negotiate preferable rates with health providers.

Yeshasvini continues to have a high utilization rate, which could be partly attributed to the client contribution, which increases awareness and induces usage. The concern with this scheme is the rising average claims ratio (157 per cent in 2010), which would make a fund with no insurer or reinsurer insolvent.

*Box 20.6***RSBY: Delivering at scale**

By the end of 2010, RSBY had been launched in 340 districts in 25 states, with 23 million active cards, insuring approximately 63 million individuals living below the poverty line. The successful implementation on such a scale can be attributed to the public-private partnership the scheme has forged. While Aarogyasri and Kalaingar collaborated with one insurer, Star Allied Insurance, RSBY in its first year worked with eight insurers and 16 TPAs to implement the scheme. Many TPAs have more localized strengths, which RSBY can exploit through its district-level bidding and contracting arrangement. While three insurers account for 75 per cent of RSBY's operations, the programme performance is correlated to the TPA and not to the insurer.

In the first year, RSBY had a 2.4 per cent incidence rate, which is lower than one might have expected since the previously uninsured target population would presumably have had a pent-up demand for healthcare services. Utilization rates are higher when cards are issued promptly. Villages that have at least one claim have a higher percentage of cards activated within the first 20 days of enrolment. To improve enrolment as well as usage, the scheme may need to engage in direct contracts with TPAs, instead of only contracting the insurers. A direct relationship with TPAs may improve performance monitoring and avoid multiple levels of sub-contracting of enrolment activities by TPAs.

Regions with more networked private hospitals show greater utilization, with a 0.2 per cent higher hospitalization rate. This could be attributed to the perceived (or actual) better quality of health infrastructure and to the availability of supplies at private facilities, and also to the proactive seeking of business by the private hospitals. RSBY is currently implementing a quality improvement initiative, which relies on a tiered incentive structure to encourage public and private hospitals to improve their health infrastructure.

Source: Adapted from Krishnaswamy and Ruchismita, 2011.

Comparative features of the four largest mass health insurance schemes

Features	<i>Yashasvini (Karnataka) 2003</i>	<i>Aarogya Sri (Andhra Pradesh) 2007</i>	<i>RSBY (National) 2008</i>	<i>Kalaaignar (Tamil Nadu) 2009</i>
Product	Individuals	Families	Families	Families
Criteria				
Unit of enrolment	Individuals	by state	US\$0.60 by beneficiary +75% by centre and 25% by State government in most cases	by State
Sources of funds	Contribution: Beneficiary 58% + Government 42% (in 2009-10)	US\$6 per family	Average US\$12 per family	US\$10 per family
Premium rate in 2009-10	US\$3.30 per person	US\$3 333 per family with additional buffer of US\$1111	US\$666 per family	US\$2,222 over 4 years, per family
Maximum insurance cover	US\$4,444 per person			
Common operations	Cardiac, ear, nose, and throat (ENT), general surgery, paediatric, obstetric, ophthalmic operations	Oncology, cardiac, trauma, gynaecological and urinary surgeries, general surgeries	Medical treatment, ophthalmic operations, neurology, infectious diseases, gynaecological and obstetric operations	Orthopaedic, oncology, urology, cardiology, hysterectomy, ophthalmology and ENT
Management tools	<ul style="list-style-type: none"> - TPA provides pre-authorization for all procedures - Tariffs for 1600 procedures pre-negotiated 	<ul style="list-style-type: none"> - Predefined diagnostic package rates and pre-authorization control for medical escalation - MIS, medical vigilance teams and deep network of project monitoring staff in hospitals 	<ul style="list-style-type: none"> - Smart card to identify verification and prior authorization - Close ended diagnostic package rates for common operations. - In-depth analysis of claim experience 	<ul style="list-style-type: none"> - Pre-defined diagnostic package rates and pre-authorization control for medical escalation, - Discharge planning with liaison officers
IT tools used	<ul style="list-style-type: none"> - Electronic claims submission - Software in all network hospitals, linked to TPA's systems 	<ul style="list-style-type: none"> - Digital signature for all users, patient digital photographs pre- and post-procedure - Comprehensive MIS and electronic claims operation and payments 	<ul style="list-style-type: none"> - Photos and biometric data of families collected on smart chip at enrolment - Smart cards enable offline authorization and batch transfer of data 	<ul style="list-style-type: none"> - Digital smart card to identify beneficiary and family - Web-based pre-authorization and claim submission - Webcams for coordination and monitoring of liaison officers in network hospitals
Hospital empanelment criteria	Minimum 50 in-patient beds + intensive care (ICU), ambulance, qualified doctors	Minimum 50 beds and other infrastructure criteria like ICU with 2 ventilators	At least 10 beds + medical, surgical, diagnostic facility + registration with IT department	Minimum 50 beds
No. of full-time staff in implementing agency	Less than 10	117	Approximately 10 at central level and 100 at state nodal agencies	Less than 10
Number of beneficiaries (Sept. 2010)	3 million	Approximately 70 million (20.4 million families)	63 million	35 million
Average cost per hospitalization (INR)	8,240	27,848	4,262	33,720
Number of hospitalizations per 1000 persons	22	5	25	4
Claims ratio	157%	69.6-128.3% (average 89%)	About 80% in 2009-10	80%

Source: Adapted from PHFI, 2011.

20.3 Distribution channels

The distribution of insurance to low-income households is difficult for several reasons, including the challenges of accessing remote areas and encouraging take-up by individuals who lack experience with complex financial products (Gaurav et al., 2011). In addition, poor households by definition face liquidity constraints in paying premiums and are reluctant to buy an intangible product with benefits that may or may not be available at some point in the future.

Listed below, more or less chronologically, are four prominent channels through which insurance has been distributed in rural India with attempts to address these challenges. Initially, before the term microinsurance was used, the Government's extensive rural banking infrastructure, the Post Office, and LIC's agent network were the primary channels for distributing affordable products, and today they remain the most prominent. In the 1990s and early 2000s, NGOs and mutuals built upon their social capital in the community to educate households in insurance and risk management, and offer customized products. Later, MFIs entered the market and provided a solution to the affordability problem by financing premiums. They also offered strong data and cash management systems, and helped facilitate the evolution of the sector from a "development" initiative to having a more commercial orientation. More recently, insurers have expanded their distribution strategy to include rural supply chains and technology-enabled direct sales channels such as rural Internet kiosks and banking correspondent networks, which have a high potential to help insurance achieve scale with basic products at affordable prices.

20.3.1 Government-facilitated channels

Before the introduction of private insurance companies in India in 1999, insurance distribution to rural areas was generally through three main channels: the vast network of LIC agents, the Government's financial infrastructure, and India Post.

For decades, LIC relied on its agents to sell life policies across the country. The scalability of this channel is attributed to three factors: 1) LIC's state-directed mandate to serve low-income households; 2) LIC's robust brand which is well known in most rural areas; and 3) its popular savings-based products with features such as return of premium. Even though its agent commission structures are at par with industry standards, the large and stable business volumes, government subsidies, and an elaborate agent development programme contributes to the viability of the model. One of the factors contributing to their popularity is the agents' ability to offer a reliable savings instrument through a convenient "doorstep service". This distribution model remains effective today. In 2009–10, LIC agents sold 38 million of the industry's total 45 million life insurance policies, highlighting these agents' success and their relevance for LIC.

India has over 32 000 rural bank branches, mostly public-sector commercial banks and regional rural banks, approximately 14 000 cooperative bank branches and 98 000 primary agricultural credit societies (PACS) (Basu, 2006). This vast network of government-dominated rural financial institutions provides directed credit, which is often accompanied by the associated mandatory and subsidized insurance cover. In addition, these financial institutions maintain a prominent life and personal accident insurance portfolio.

India Post is the world's largest postal network, with 90 per cent of its post offices in rural areas. Its long history and deep outreach has helped make it a successful channel for the delivery of financial services, managing more than 240 million saving accounts. In 1995, India Post introduced its Rural Postal Life Insurance (RPLI) scheme with a specific mandate to provide cover to rural households, disadvantaged persons and women workers. In 2009–10, RPLI had 9.9 million active policies with an aggregate sum assured of INR 596 billion (US\$12 billion) from its six life insurance products.⁷ Besides distributing its own product line, the postal network also acts as an agent to distribute Oriental's general insurance products. Oriental's personal accidental insurance policy at an annual premium of INR 15 (US\$0.30) for a sum insured of INR 100 000 (US\$2 222) has been particularly popular (India Post, 2010–11).

20.3.2 Mutuals and NGO-led models

Mutuals and NGOs are community-based organizations with broad development agendas that also use insurance to achieve their objectives. They tend to be involved in diverse activities, such as women's empowerment, livelihood creation, disaster relief, and infrastructure development such as schools, wells and clinics. India is fortunate to have more than 25 000 civil society organizations, many of which have paved the way for the present vibrant microinsurance market, particularly health cover by community-based health insurance (CBHI) schemes.

Membership in CBHIs has been stable due to the high value provided by their client-responsive products and services, but financial viability has been a concern. Members have positive perceptions of their unique features, such as payment of premiums in grains, no-claims bonuses and loyalty incentives that increase the cover limit from the previous year. Greater product maturity has been demonstrated through additional services. For example, SKDRDP's scheme provides surgical and non-surgical hospitalization without waiting

⁷ The six products are Whole Life, Convertible Whole Life, Endowment, Anticipated Endowment for 15 and 20 years, Joint Life Endowment, and Children's Policy. In 2008–09, 45 000 claims were settled amounting to INR 1.3 billion (US\$26.4 million). All operations of RPLI are computerized (India Post, 2010–11).

periods for domiciliary treatment,⁸ maternity services, accidental death and natural calamity covers. Other CBHIs offer “value-added services” ranging from consultations through telemedicine to the provision of drugs and ambulance services. CBHIs tend to be affordable when they work in tandem with the government health infrastructure to ensure easy access to care. They also intervene to increase access to drugs at affordable prices.

While these models have high re-enrolment levels and perceived higher client satisfaction, they are often unable to scale up due to limited management capacity and insurance expertise. There are some notable exceptions, such as the DHAN Foundation, VimoSEWA, SKDRDP and Uplift (*see Box 5.1*), which have all shown impressive membership growth, but in general CBHIs tend to remain small.

The relationship between CBHIs and insurers has evolved over the years. In some cases, CBHIs prefer to carry the risk themselves (e.g. DHAN Foundation); others work in partnership with insurers for standard covers and then retain some of the risks to provide benefits that the insurers do not cover (e.g. VimoSEWA and SKDRDP).⁹ However, CBHIs that retain all of the risk often offer products with limited cover in part because reinsurance facilities are not available to them in the current regulatory environment. Indeed, these schemes operate in a regulatory vacuum because IRDA recognizes only insurance companies as entities that can offer insurance contracts.¹⁰

The mass health insurance programmes such as RSBY, which target similar populations, may also pose as competition to mutuals and NGOs. To accommodate these social protection programmes, community-based schemes are exploring ways of supplementing the benefits provided by the Government. Government programmes offer a unique opportunity to involve CBHIs by building on their core skills of community mobilization, which could improve enrolment rates and client awareness of the mass health schemes. Additionally they provide capacity to monitor local health facilities, which would be mutually beneficial as it could ensure better health services for low-income households while providing greater legitimacy to mutuals and NGOs.

⁸ Domiciliary hospitalization is provided when the condition of the patient is such that he or she can be treated from home under nursing supervision.

⁹ For example, SKDRDP's health scheme has a “zero rejection” policy whereby the NGO covers claims it considers genuine but are not approved by the insurer. It also offers domiciliary treatment cover and rest allowance, which the insurer does not. However, in only three of its seven years of operation have the claims paid by the scheme been less than total premiums collected, making it difficult for SKDRDP to find private insurers, who, unlike public insurers, rarely have access to state subsidies and are keen on insuring sustainable portfolios.

¹⁰ For more details about regulatory conditions for mutuals and community-based schemes, see section 25.4.

20.3.3 MFI distribution

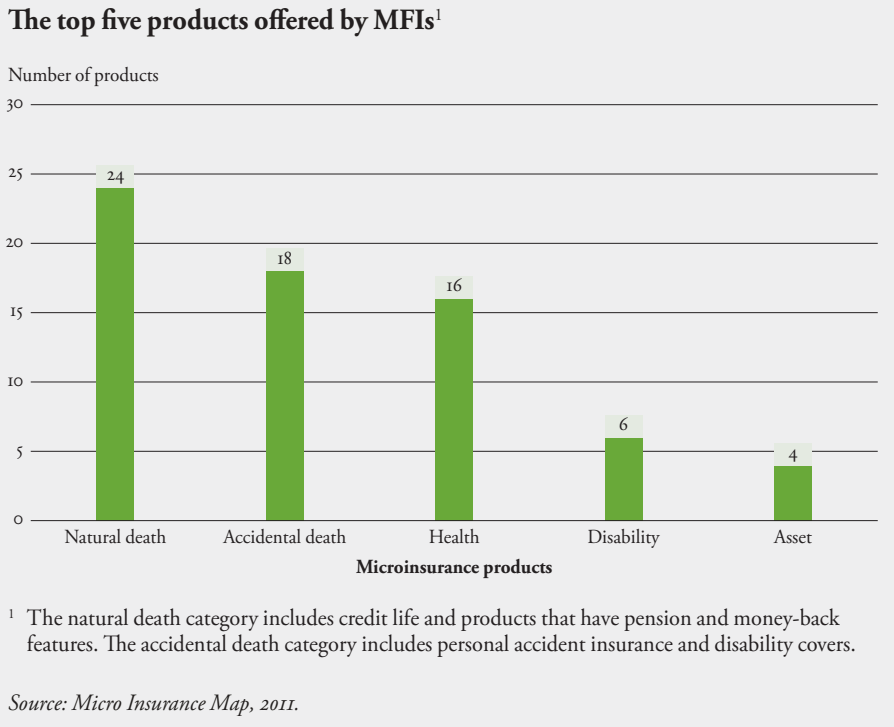
Unlike NGOs and mutuals that often provide microcredit as one of many interventions in the community, Indian MFIs are focused primarily on providing financial services. Their close links to their clients reduce transaction costs, adverse selection and fraud for the insurer. In addition, credit-linked insurance decreases the MFI's repayment risk, and therefore incentives for the delivery channel are well aligned with the interests of the insurer. With the exception of the 2010 Andhra Pradesh crisis, the success of microfinance in India raised hopes that these institutions with strong data and cash handling systems could serve as an effective channel for the provision of insurance and other risk management solutions.

MFIs are spreading rapidly in India, thus representing a scalable delivery channel. According to the industry association Sa-Dhan, MFIs served more than 26 million customers in 2009–10, an 18 per cent growth in clients and a 56 per cent growth in the loan portfolio from the previous year (Srinivasan, 2010). Compulsory credit-linked products have already demonstrated how MFIs can help insurers reach their rural targets. There have been problems with more ambitious products, however, which can be partly attributed to the insurers' lack of capacity to cope with clients and healthcare providers in rural areas, as well as the misalignment of incentives where MFIs are only compensated for originating policies, not for servicing them.

In 2007–08, CIRM surveyed 47 MFIs to understand their involvement in microinsurance and found that the vast majority of the products were mandatory and credit-linked on behalf of insurance companies. Figure 20.5 shows the type of products offered.

The few voluntary products primarily covered health and accidental death. While there is a demand for health risk solutions, available products generally cover rare catastrophic events and therefore do not respond to households' needs to cover moderate and more frequent risks. MFIs have found it difficult to offer affordable voluntary cover because of two major factors: a) staff are ill equipped to advise households on risk management solutions; and b) it consumes considerable staff time. Investing in client education and insurance origination is difficult for Indian MFIs known for their streamlined processes aligned to offer a basic loan product. Few MFIs have modified processes to accommodate product diversification.

Figure 20.5



Insurers working with MFIs often assume that they have the ability to provide on-the-ground support for the early reporting of claims and assistance to beneficiaries in producing the necessary documentation. Although many of the larger MFIs are able to support claims settlement and manage insurance activities, this is not the case with newer, smaller MFIs. Over half of the MFIs surveyed did not maintain a separate microinsurance balance sheet, did not undertake claims analysis, and did not invest in staff training to deliver microinsurance.

Even large, capable MFIs can be risky delivery channels. Insurance is not their core business, but rather a supplementary activity. The microfinance crisis in 2010 directly affected the portfolios of large, and some medium-sized MFIs with substantial exposure in the state of Andhra Pradesh. The crisis had additional global implications, as described in Box 20.7, which could present an opportunity for microinsurance depending on how players respond to the regulatory change that prohibits MFIs from charging clients service fees in addition to the commissions they receive from insurers.

*Box 20.7***Opportunity in the crisis?**

A rivalry between competing MFI and state-supported SHG models in Andhra Pradesh had been simmering for years. In 2010, the initial public offering of SKS, India's largest MFI with a sizeable share of its portfolio in Andhra Pradesh, along with media reports linking loan collection practices to suicides, prompted Andhra Pradesh's Chief Minister to pass "an ordinance to protect the women self-help groups from exploitation by the microfinance institutions". This ordinance sought to impose a range of new conditions on MFIs, including district-by-district registration, requirements to make loan repayments near local government premises, a shift from weekly to monthly repayment schedules, and other measures to contain supposedly unethical collections, high interest rates and profiteering. This ordinance has contributed to a general environment where MFI ground-level operations are impeded and loan repayments for MFIs in Andhra Pradesh dropped dramatically. MFIs unable to effectively negotiate their financing could become illiquid and insolvent.

Following concerns about customer protection, the banking regulator, Reserve Bank of India, imposed an interest-rate cap on MFIs' loans. In this environment, identifying alternate sources of revenues are critical for MFIs to survive. As they explore other revenue-generating opportunities, the crisis may become an opportunity for microinsurance. The big question is whether microinsurance can become part of the MFIs' core business, and whether they can evolve beyond mandatory loan-linked schemes to offer a range of customized insurance and risk management solutions.

Source: Adapted from CGAP, 2010; Balkenhol, 2010.

20.3.4 New distribution channels

Even though MFIs are growing rapidly, they reach only a small percentage of the rural population. Indian insurers are also distributing cover to the poor through new channels, including supply chains, banking correspondents and direct agent sales.

Rural supply chains: Other aggregators involved in extending insurance in rural areas include agriculture supply chain firms, such as:

- **Dairies:** In Tamil Nadu, United India in collaboration with Hatsun Dairy is attempting to address the liquidity constraints of rural households by distributing livestock insurance where premiums are paid up-front by dairies and collected against the household's milk income.
- **Tractor sales points:** HDFC Ergo distributes state-subsidized weather-index insurance in Madhya Pradesh through a tractor retailer.
- **Fertilizer and seed companies:** Similar to the bundled personal accident cover IFFCO offers with its fertilizer bags, Pioneer Seeds also experimented with a free insurance cover, underwritten by ICICI Lombard, which would pay benefits in seeds if there was insufficient rain during the germination period.¹¹ Such a link reduces marketing and distribution costs for insurance.
- **Farm input outlets:** AIC has leveraged agricultural input providers such as Hariyali Kisan Bazaar to distribute agriculture insurance.

Rural Internet kiosks: Internet outreach in rural India has been expanding. One big fillip to this growth has been the Government's ambitious e-governance plan to set up kiosks in rural areas to facilitate information and data services. Known as common services centres (CSC), these kiosks with an Internet-connected computer are delivery points for public, private and social sector services. As of August 2011, there were 96 000 functional CSCs in rural India managed by 15 private state-designated agencies (SDAs). Some SDAs offer insurance, such as SARK Systems offering products by Birla Sun Life and HDFC Ergo, while 3i Infotech has collaborated with MNYL to distribute life insurance. Besides the Government's CSC network, there are also private kiosk channels, such as COMAT, which distributes LIC's life insurance products through its 2 000 rural business centres in five states (Department of IT, 2011).

¹¹ This product was offered for one year with mixed success. A key challenge was the lack of incentive for the retailers to undertake the additional paperwork involved in providing insurance receipts. Also, since the insured year was a good year, no claims were paid. According to the retailers, the intangible benefit of insurance did not influence the farmers' seed purchase decision as much as the popular free umbrella scheme of previous years (Akhilandeswari and Patankar, 2010).

Box 20.8

New distribution channels and technology

An important factor supporting the emergence of these new distribution channels is the availability of new technologies that provide a “light” customer interface in rural areas without a branch office infrastructure, facilitate transparent communication between the various organizations involved in the supply chain, and improve the claims experience. Three technologies that support different aspects of that process are mobile phones, PoS devices and biometric smart cards.

Mobile phones

Even though Indian regulation inhibits premium collection through mobiles, they have been used for other purposes, such as:

- **Insurance origination:** Thinkways, a mobile technology player, has collaborated with HDFC Ergo to develop a mobile application for insurance data collection and policy issuance.
- **Value-added services:** WRMS offers weather forecasts as text messages along with its insurance products to improve client retention.
- **Transaction accounts:** While banking correspondent FINO uses PoS machines and mobiles (*see Box 25.6*), Eko relies exclusively on mobile phones to open up transaction banking accounts, which will be a powerful platform for insurance distribution.

Point-of-sale devices

- **Connectivity challenges:** MNYL piloted PoS machines because there was an assumption that policyholders would want receipts when making their premium payments. Yet the PoS devices had major connectivity problems and were therefore eventually scrapped in favour of scratch cards and mobile phones, both of which were well received by customers.
- **Remote diagnosis:** CARE Foundation uses a handheld device to offer outpatient insurance services through a village health champion (*see section 24.2.2 and Box 5.3*)

Biometric cards

- **Fraud prevention:** RSBY along with other mass health schemes employs a biometric smart card to reduce identity fraud.

Linking client enrolment with transaction processing systems, technology players such as Gradatim offer front- and back-end solutions for intermediaries to allow greater integration of systems among players. This integrated approach streamlines processes and reduces the cost of sales, underwriting and claims administration.

Source: Authors.

Bancassurance and banking correspondents: SBI Life, the largest private life insurer in the country, distributes the majority of its portfolio through the bank branches of its parent company to reach self-help groups. The new variation of bancassurance is with banking correspondent companies, such as Financial Information and Operations Network (FINO), A Little World and Eko Indian Financial Services, which are catering to the huge unmet demand for convenient banking services and offering an avenue for insurance distribution. This channel is unique because it relies on voluntary sales by a local agent, so products must be simple and pre-underwritten, with easy claims adjudication. Bharti Axa has collaborated with Eko to provide Bachat Bima (savings insurance), while HDFC Ergo's alliance with FINO sold 100 000 personal accident policies. These products are part of the trend to achieve high business volumes by distributing simple, low-value, affordable products.

Direct sales: Historically LIC, and more recently Tata AIG, have used individual agents to deliver life insurance in rural areas. A more recent innovation with potential to scale has been MNYL's technology-enabled agents distributing the Max Vijay product and servicing it through point-of-sale (PoS) machines. This model has experienced mixed success. Although the insurer managed to sell more than 90 000 policies, it had less success encouraging top-ups, or the on-going payments, possibly because the completely flexible approach with no payment schedule was too flexible, and did not instil sufficient discipline (*see Chapter 8*).

In general, the potential success of many of these new delivery channels hinges on technological solutions, as illustrated in Box 20.8, which facilitate greater outreach and efficiency of microinsurance (*see Chapter 24*).

20.4

Conclusion: Catalysts of success

By most accounts, the development of microinsurance in India is a success story. While there is certainly room for improvement, anyone interested in expanding social protection and/or developing inclusive insurance markets could learn valuable lessons from the Indian experience. Perhaps one of the more interesting observations is how closely integrated the state and the market can become.

Based on the evidence from India, the following are critical to a sustainable and scalable microinsurance market: 1) government commitment; 2) conducive regulation; 3) technological solutions; 4) new stakeholders; and 5) specialized products.

1) *Government commitment*

- **Public insurers and market liberalization:** Large public insurance companies with an explicit mandate to reach underserved areas have been a major asset for the development of microinsurance in India. However, the participation of private insurers with foreign investment has been critical to encourage competition and stimulate innovation.
- **Cautious allocation of subsidy:** Premium subsidies can be a way to incentivize markets to provide relevant protection for the poor. However, subsidies that crowd out market-based solutions should be avoided. Some government schemes, like the agriculture and livestock programmes, end up catering to large and medium-sized farmers who can afford insurance. In addition, products with subsidies at both ends – premiums and claims – inhibit transparent price discovery and make it more difficult to produce a reliable evaluation of programme costs and success. It is also advisable with subsidized products to maintain partial premiums, which allow users to signal the relevance of the product and its providers through take-up and renewal.
- **Accreditation and standardization of infrastructure:** The government can be an important player in creating industry-wide standards, which would lead to greater efficiency as service-quality monitoring costs for insurers diminish. For example, mass health schemes have started to create protocols and to invest in the accreditation of health providers and standardization of health care. In agriculture insurance, to improve data reliability and allow reinsurers to charge lower “unknown risk” premiums, a certification process for data from private weather stations has been implemented. Going forward, a more comprehensive accreditation and standardisation process will lower entry barriers for insurers.
- **Public-private partnership:** The Government's transition, from directly providing insurance through its own insurers and distribution channels, to financing premiums for portfolios managed by public and private insurers, has successfully supported the achievement of scale, as seen in the mass health insurance schemes and weather-index insurance market. Effective implementation requires a transparent tendering process and the public sharing of risk data.
- **Relevant infrastructure:** Microinsurance has benefited significantly from extensive financial sector infrastructure, with its network of bank branches, post offices, Internet kiosks and, soon, banking correspondents. It is important to also consider healthcare facilities, weather stations, telecommunications and other supportive infrastructure that are critical to the expansion of microinsurance. Where possible, governments should encourage the private sector to invest in some of that infrastructure.

2) *Conducive regulation*

- **Forced familiarity:** The IRDA's Rural and Social Sector Obligations have contributed significantly to ensuring that insurers focus on the low-income markets. With many companies exceeding their rural and social sector targets, it appears that the industry sees microinsurance business opportunities. Quotas are controversial and certainly not for everyone. But would the private companies have become involved in microinsurance if they had not been obliged to? Perhaps some would, but not with the same level of investment and commitment that they have shown to date. Microinsurance has developed more quickly in India because of the rural and social sector mandates.
- **Microinsurance regulations:** Unlike the obligations, which are mandatory, the Micro-Insurance Regulations, 2005 are facultative in nature, to create an enabling environment to help insurers serve low-income households. While the results have been mixed, the regulations have allowed NGOs, SHGs and some MFIs to operate as microinsurance agents and offer both life and non-life products, providing a legal identity for social aggregators.
- **Supportive regulation in allied sectors:** Draft guidelines from the Ministry of Health and the Ministry of Information and Technology on issues such as e-health, via the Internet, and telemedicine have sent positive signals for private investment in more comprehensive health insurance products involving alternative models of healthcare provision and health information management.

3) *Technological solutions*

- **Identification systems:** Most products at scale have adopted new identification technologies, such as RFID and biometrics, to improve efficiency, control fraud and ensure timely claims settlement. Efforts to create a nationwide unique identification number will also make significant headway towards addressing the challenges of identification and data management, and will enable insurers to reduce origination and claim settlement costs.¹²
- **Information management:** Technology platforms are needed to allow seamless interaction among players: between insurers, TPAs and the distribution infrastructure. Such technologies have also allowed insurers to harness existing infrastructure such as post offices and banks.
- **Front-end solutions:** Investment in tools such as the use of point-of-care diagnostics (e.g. CARE Foundation in its outpatient insurance pilot) and

¹² Approximately 9.5 million individuals have already received the Aadhar unique identification card. It will store basic demographic data and biometric information on each individual, such as photograph, ten fingerprints and an iris scan, in a central database. A similar effort in Pakistan titled National Database and Registration Authority (NADRA) has already covered 96 million individuals and has been valuable in identifying households for delivery of government programmes.

hand-held devices (e.g. by MNYL) is required to provide reliable and low-cost products. Going forward, it is anticipated that insurers will make use of technology-heavy channels such as banking correspondents, which use mobile and PoS devices along with biometric cards to address operational challenges.

- **Risk reduction:** Technology does not mean just high tech; many low-tech solutions can make significant contributions to better risk management practices, for example through health education of preventable diseases and improved livestock management practices. Insurers have incentives to prevent claims, which result in positive development results.
- 4) *New stakeholders*
- **Specialized players:** WRMS played a critical role in enabling the weather insurance market to reach scale through innovative products customized for specific risk groups, distribution channels and crops. Now software companies are emerging, such as Thinkways and Gradatim, to build information systems for origination and claims management while creating actuarial data for programme improvement.
 - **Third-party administrators:** Microinsurance requires huge volumes and insurers often do not have the in-house capacity to manage the administration themselves. For health microinsurance, TPAs can play a critical role in supporting the development of large schemes, although they are not for everyone. Dissatisfaction with administrators has led some MFIs and NGOs to set up in-house processing centres, which reduce claims origination delays and overall claims management time. Such efforts require closer collaboration with insurers to ensure seamless process integration.
 - **Alternative distribution:** The next wave of distribution channels may be the most promising – including agriculture supply chains, banking correspondents, kiosks offering Internet access, and local retailers with point-of-sale devices – all focused on facilitating access and reducing transaction costs for customers. Incentives are better aligned where distributors have a vested interest in partnerships, such as dairies that want to ensure the predictability of milk supply or seed companies that provide benefits in kind.

5) *Specialized products*

- **Portfolio covers:** With a huge untapped market, the microinsurance industry's key challenge has been that of market entry, i.e. reaching out to households that have had no prior insurance access. Products that are light and can easily go "viral" have received greater attention from practitioners. Transaction cost is a prominent part of microinsurance products, being as high as 40 per cent of the premium, making formal insurance undesirable for households. Low insurance

literacy further exacerbated by a lack of sales channel training makes direct sales costly and exposes the client to possible mis-selling. An alternative, more affordable approach to market entry is to offer portfolio or meso-level covers to intermediaries, as tested by BASIX for its agriculture loan portfolio, which circumvents the client education cost and helps cover insurable risk at affordable rates.

- **Composite products:** With the weak last-mile connectivity available to low-income households, life and general insurers face distribution problems. While the microinsurance regulation has allowed composite products, few insurers have offered them. The SBI Life composite product aimed at insuring life and property risk cuts down on a double transaction cost to the household, and therefore may be a step in the right direction towards more affordable, comprehensive cover.
- **Products for moderate risks:** Many initiatives offer cheap products that cover low probability events to make them more affordable. These products tend to generate fewer claims, leading to low re-enrolment rates, which is an important yardstick for measuring perceived customer value. To increase value, products can give households the option to choose between moderate and catastrophic covers, increasing household awareness of cover and exclusions.
- **Providing value-added services:** The preferred model of bundling services would be where the additional package reduces the insured risk, thus aligning the interest of the insurer (or the intermediary) in delivering it. For example, intermediaries may provide vaccination and fodder enrichments with cattle insurance. Another such example is the provision of outpatient coupons or healthcare camps to reduce incidents of hospitalization. Such arrangements ensure that the clients receive something tangible for their premium, even if they are unable to make a claim, increasing the perceived value of the product.

The Indian achievement over the past decade to protect the poor through the involvement of all sectors of society has been nothing short of remarkable.

Certainly, India has not figured everything out. There is a need to recognize that poverty and vulnerability are urban as well as rural phenomena, and to consider interventions that will benefit slum dwellers and migrants. The compulsory nature of many state-subsidized products does not allow feedback for product improvement. Additionally, dependency on the credit programme and banking network reduces the ability of insurers to control the quality of their portfolios. There is certainly scope for improved consumer education and consumer protection, to support sales while avoiding a microfinance-like crisis in the microinsurance sector. And the regulatory constraints that prevent insurers from using mobile-phone-based insurance sales and premium collection are impeding the next wave of innovation.

Regardless of the challenges that remain, India's success, involving a diversity of approaches and players, combining financial inclusion and social protection, serves as a beacon of inspiration.

21 Pricing of microinsurance products

Denis Garand, Clémence Tatin-Jaleran, Donna Swiderek and Mary Yang

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The premium or price of a microinsurance product is an important feature that affects client value and viability. If the premium is too low, the plan may collapse; if it is too high, the take-up may be low (*see Box 21.1*). A clear understanding of each component of the premium allows one to assess the validity of the proposed price when negotiating with a risk carrier or when selling to customers.

The pricing of a microinsurance product cannot be isolated from the context in which the product is offered or from the product design itself. Pricing is heavily influenced by the socio-economic state of the target market, the way the product is distributed, the operational processes that support the product and the overall management of the scheme. While the steps required to price a microinsurance product are similar to those for a mainstream insurance product, pricing specialists must adapt to the sparse data available, take different factors into consideration and assess expected trends to develop a logical price for a market with limited capacity to pay. To maintain relevance, experience with the product must be continuously monitored and the pricing structure refined once sufficient observations have been made.

Proper pricing is crucial for the long-term viability of a product. Microinsurance providers should seek pricing assistance from specialists with actuarial skills. Perhaps more importantly, microinsurers must develop a deep understanding of how pricing is affected by product features and market behaviour, as well as by operational and administrative processes. Successful pricing specialists strike a balance between affordability and viability by understanding the target market, working closely with the product design team, and liaising with other stakeholders who influence product performance.

This chapter, which complements Wipf and Garand (2006), presents the pricing cycle, discusses the handling of data limitations and expands on the additional factors to be considered when pricing a microinsurance product. The chapter concludes by demonstrating the experiences of two organizations and suggesting additional work that can be carried out by the actuarial community to address the current pricing challenges.

Box 21.1

Consequences of gross pricing errors

It is important to understand the possible consequences of errors in the pricing of a microinsurance product. These errors affect not only the financial results of the provider, but also the nascent microinsurance market.

If the premium is set too high:

- Low take-up may result if potential customers perceive a product as unaffordable or as providing poor value. If take-up is low or does not increase over time, scale is not achieved and sustainability cannot be attained.
- Anti-selection may increase because an expensive product will attract only clients who see value in a high-premium product, i.e. those more likely to submit claims.

If the premium is set too low:

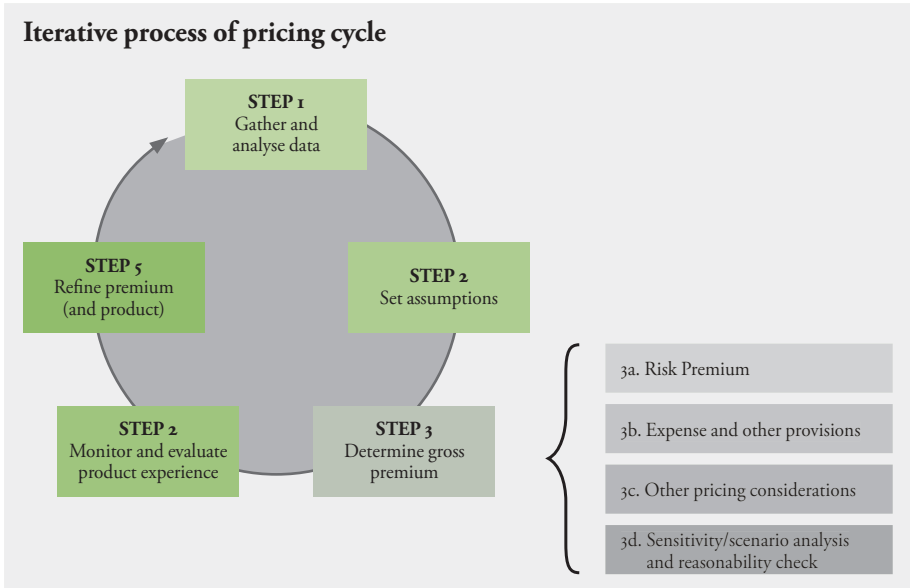
- Premiums collected will not be sufficient to cover claims and other expenses, leading to poor financial results for the provider.
- Large price increases may be required in the short term to correct inadequate pricing and maintain solvency. As a result, the current policyholders may not renew their policies, sales effort could be wasted and the target population may lose confidence in the microinsurance provider. For example, Karuna Trust in India provided a highly subsidized health insurance product. When the subsidy was removed, the renewal rate dropped to 10 per cent.
- Insolvency could result, leading to the discontinuation of the product, which could turn the target population away from insurance as a financial risk management tool.

21.1

The pricing cycle

Like the pricing process applied to mainstream insurance products, a microinsurance pricing specialist should improve the premium over time through an iterative process that includes gathering information, setting assumptions, calculating a premium, reviewing past experience and adjusting the pricing (*see Figure 21.1*).

Figure 21.1



Step one

Before jumping into the pricing exercise, it is important to understand the target customers and the context of the insurance product. This information will help determine the type of data to gather, the sources for the required data, and how the data should be assessed for suitability.

Step two

Based on the data and actuarial judgement, appropriate assumptions are set. The pricing exercise consists of incorporating the quantitative and qualitative information on the target population, claims frequency, average claims costs, expenses (taking into account the implementation processes and product management approach), a profit margin and other loadings. Other assumptions may need to be incorporated depending on, for example, the take-up.

Step three

Using these assumptions, underwriting rules and the product design, the pricing specialist models the expected experience of the product to arrive at the risk premium. As with pricing for a mainstream insurance product, to produce the premium, also known as the gross premium (which this chapter refers to as simply “premium”), additional elements will be incorporated.

A sensitivity analysis testing the impact by tweaking a particular variable – whether an assumption, a product feature or a cost associated with a step in the operational process – can help identify factors that drive the financial performance of the product. It can also indicate the effect of different actual experiences on the product’s financial performance.

At this point, alternative product designs may need to be considered, for example reducing or changing the benefit structure to make the product more affordable. The initial premium should also be checked with the target customers to verify that it is reasonable and acceptable to them and that the product features are suitable.

A number of iterations of the process described in step two and step three may be required to arrive at an acceptable premium.

Step four

Once the product is launched, it is essential to collect data on actual claims and expense experience so that anomalies can be investigated and assumptions, premium, product features and processes can be improved. Besides a quantitative experience analysis, feedback from key field staff on the product and the processes related to both distribution and servicing could lead to refinements that in turn affect the premium. Interviews with policyholders and prospective customers can also help verify qualitative data and confirm the project team's understanding of the market's perception of the value the insurance product provides.

Step five

On the basis of the experience analysis and feedback on the product, assumptions and the premium can then be refined. Lessons should be drawn on the sustainability of the premium and the adequacy of the product features. If necessary, the product features and/or operational processes may need to be adjusted to match the expectations of the population and ensure the sustainability of the scheme.

Lack of data remains the main constraint for pricing microinsurance products. In many cases, it can be overcome by making initial informed assumptions from general population data and qualitative data on the target population. It is important to remember that the process does not end with the initial pricing. To keep the pricing relevant, it is necessary to collect data once the product has been launched, monitor results, and then refine assumptions as necessary. The steps in the pricing cycle are discussed in more detail in the following sections.

21.2 Gather and analyse data

21.2.1 Getting to know the target customers

Pricing a microinsurance product is similar to being the first risk carrier to develop a new product in an emerging market. It presents challenges that arise from the lack of information about the underlying risk, and the absence of competitors to benchmark a product or assess the market. There may be additional difficulties if the underwriting and pricing specialists lack microinsurance experience.

There are striking differences between the customers a commercial insurer would usually serve and the lower-income segment of the population. This segment does not have the same priorities or financial resources, and may not be reachable through the same distribution channels. Serving the bottom of the pyramid (BoP) requires a different approach to product design, distribution and delivery. It is therefore logical that, in pricing microinsurance products, new factors related to the context and the different approach need to be taken into account.

Before designing and pricing an insurance product, the project team, including the pricing specialist, should examine the intended customer segment. Information gathered not only influences the product features that can meet the needs of the segment, but also how potential usage of the product can affect pricing. Gathering quantitative and qualitative data on the following aspects helps the project team identify and prioritize the target customers' insurance needs:

- the type and range of outlay expended by low-income households as the result of a risk event;
- how they have been coping with financial shocks resulting from different types of events; and
- what they perceive as the major causes of financial shocks.

This market research can even shed light on other product design aspects, such as how the target market defines the “family” unit. In an emerging market, the family may include grandparents, multiple spouses, and other extended family members. This information will affect the estimation of family composition for the purpose of pricing family covers.

Depending on the type of insurance, one could also determine the value at stake by gathering, for example, data on livestock value, crop value or the value of other assets owned. This information provides the project team with clues on suitable cover amounts and the expected severity of claims.

A major constraint for a potential microinsurance customer is limited financial resources. Income is often irregular and insufficient. Coupled with little or no savings, budgeting for the primary needs of the household becomes extremely difficult. Although the need for protection may be acknowledged by the household, the ability to pay (ATP) and willingness to pay (WTP) are major factors in the decision to opt for insurance as a risk management tool (*see Chapter 7*). In serving the low-income market, an appropriate price is all the more important as it will have a significant impact on product take-up.

By gathering data on the households' income patterns, the project team can gain a sense of the poverty level and the ATP. Through focus group discussions (FGDs) or surveys, the project team can accumulate information on WTP and the available alternatives to formal insurance. Respondents often overestimate the amount they would be ready to spend on insurance and their input should be considered with caution. Results are not transferable to other countries, or even regions in the same country, due to attitude and cultural differences (*see Box 21.2*). Although collecting information on ATP and WTP is a rough exercise, it helps the project team understand both the constraints on the premium structure and "competition" for the proposed insurance product, and ensure that the premium falls in a price range affordable and acceptable to the target population.¹

Box 21.2

Cultural barriers to WTP

The WTP is not just a factor of pure household economics, but also one of cultural orientation. In the Philippines, a one-week mourning period observed by the family is the way loved ones pay respect to the dead. The amount expended on the funeral and related events raises the status of the person who passed away. Therefore, Filipinos see value in funeral insurance. On the other hand, in India, costs and customs are different. Funeral ceremonies do not have the same social importance as in the Philippines. So funeral insurance may not be as relevant in India, and the WTP for this type of product may be much lower. Furthermore, in many cultures there is an aversion to buying insurance as it is believed that it will bring on the event: appropriate communication can help overcome the cultural barriers and promote take-up.

The constraints of ATP and WTP should not eclipse the need for adequate cover. If low-income households do not see value in the product offered, they will not spend their hard-earned money on it. It is thus crucial to compare the initial premium with the cover to determine whether the product offers value for money. The benefit levels may need to be adjusted to ensure a balance between affordability and coverage (*see Box 21.3*).

¹ For further details on product design and demand research, see Wipf et al., 2006; Cohen and Sebstad, 2006.

Box 21.3

Financial limitations and liquidity of low-income households

In Chennai, India, a slum dweller, like others in his community, has miniscule savings of US\$2 at his disposal for emergencies. When he has to see a doctor, he asks his relatives and neighbours for a loan to pay for medication (outpatient episode costs are usually US\$2 to US\$7). If the treatment exceeds US\$10, he resorts to borrowing from a moneylender to finance outpatient or in-patient services.

On the basis of observations from several focus groups of urban MFI clients, low-income households usually have access to a social network to support minor expenses (US\$10). Participation in the social lending of this type of network is an obligation deeply ingrained in the culture of the community. Despite the limited financing accessible through social networks, they are valued for their flexibility. As an alternative, moneylenders may provide emergency relief, but charge exorbitant interest rates.

These details serve as clues to a product type and product design suitable for a slum dweller in Chennai. The product design, along with information such as disposable emergency funds, income and WTP, can help check that the suggested premium is reasonable.

21.2.2 Prudence in utilizing data with limitations

The risk premium for any insurance product should be determined from a quantitative basis. Unfortunately, if the product or the market is new, historical data is not likely to exist. The event frequency, loss and severity, and demographic data from which assumptions can be derived are often insufficiently documented to permit accurate pricing. Except for a mature product for which a sufficient volume of risk data has been properly collected, loss data is often not available, not readily usable or not as reliable as for a mainstream insurance product. The first step is then to determine the type of data needed and available data sources. Following data collection, the quality of the data must be assessed and analysed to set appropriate assumptions.

Data sources can range from public data (e.g. census or academic) to distribution channel records (*see Table 21.1*). This data is usually not the same as the claims data maintained by a commercial insurer. For a health product, information on the average annual family medical expenses or the frequency of a particular disease may be available, but it would be difficult to obtain a complete record of illnesses affecting the target segment. Depending on the type of risk, data availability will vary. As another example, records on livestock losses are usually difficult to obtain.

Although demographic information on the target segment may be limited, delivery channels that serve this segment may be a source for this type of data. For

example, if a life insurance product is compulsory for clients of a microfinance institution (MFI), then one can use the MFI's database.² This information may not be fully accurate because some MFI clients may not know their age or the organization may not have captured this information properly. If the product is voluntary, then the uncertainty is even greater and a better understanding of the defined target segment is required to set the initial demographic assumptions such as age distribution, gender and occupation.

Table 21.1

Potential sources of data to price a health product for a farmers' cooperative

<i>Data type</i>	<i>Data sources</i>	<i>Content</i>
Demographic	Records of members maintained by MFIs and cooperatives serving as distribution channels	Age, gender, family composition, income level
Socio-economic	Survey of target population and FGDs	Income level, WTP, ATP (as well as demographic information)
Health expenditures, costs and service access	Studies on or records from any prior schemes. Local NGOs and other organizations working in health or agriculture may also have valuable information	Data on health of the farmers and their relatives
	Service providers	Frequent health conditions and cost of treatment, medical cost inflation
	National data	Surveys and data from the Ministry of Health can provide information on, for example, hospitalization frequency, average cost of hospitalization in a public hospital. The Committee for Public Health Surveillance can provide information on incidence of the most frequent diseases
	Case studies and academic papers	A medical study may describe whether this group has access to health services and/or prevention programmes. A health economics paper may provide data on services accessed
Economic	National data	Interest rate, general inflation

While public data are a reasonable alternative, they should be validated by comparison with data from other sources. This means that the quality of the limited data available must be understood. Since the data on which microinsurance pricing relies is often not intended for insurance calculations, attention must be paid to its definition and quality when considering its use for risk premium computations.

² An MFI in Fiji wanted to add a funeral product to its portfolio. The premium was obtained from an insurance company that could serve as the risk carrier. This premium was compared to the client information maintained by the MFI. An analysis indicated an expected loss ratio of 40 per cent, pointing to poor client value. Hence, the MFI did not proceed with this insurance product.

Data from national censuses, surveys, studies and international development indicators, often collected by public organizations, may be available. However, their quality could be inconsistent. Furthermore, national survey data is usually not representative of the microinsurance target customers. Sufficient details may not be available if only macro-level information is published. Other information such as weather data used to develop weather indices does not exist on a sufficiently large scale to be useful to practitioners. Particular care must be taken when comparisons are drawn across schemes from different geographic regions and countries.

Since quantitative data of sufficient quality may not be available and obtaining more detailed and reliable data may be costly and time-consuming, the available quantitative data should be supplemented with qualitative data collected through FGDs and interviews with key sources that have a good understanding of the target population (e.g. NGOs, social workers and MFI staff). Living conditions (e.g. sanitation, shelter), occupations (e.g. hazards, income flow, income level), access to health and financial services, literacy and cultural references are all useful for the assessment of potential take-up, claims frequency and claims severity for an insurance cover. For example, what kind of access does the target population have to health services or, in the case of livestock insurance, to veterinarians? When and how often do they access these services? What per cent of the target population has savings accounts? This type of information can help determine the required cover, willingness to purchase a particular type of insurance, and the riskiness of the target population relative to the data available for the general population.

Assumptions on the expected loss will need to be derived from the limited information available. Qualitative data can improve pricing by verifying that the assumptions are realistic. Microinsurance pricing should not be based only on hard data, but must also consider additional information such as customs and culture, local demographic and economic factors, quality of health care and agricultural practices, and in particular, how the plan will be managed.

Once the data has been assessed, data gaps need to be identified and discussed in the project team. A systematic approach to filling the data gap can then be designed and implemented to monitor actual experience after the product is launched.

National data might not be a good substitute for experience of the low-income segment because it does not necessarily represent the experience of the target customer segment. National-level data includes private health insurance and the experience of the well-off segment of the population. The specific characteristics of a region and/or population segment are buried inside the national view. Assumptions based on national-level data may lead to under- or

over-pricing. In the absence of more information on the distribution of healthcare expenses, using only the data shown in Table 21.2 does not enable conclusions to be drawn on a cover limit that would exclude very risky expensive profiles, but still cover most health treatment costs for the target segment. Average and distribution are two different types of data and cannot be used interchangeably.

Table 21.2

Common errors in deriving health insurance assumptions from scant data

<i>Regional data and cover limit</i>	<i>India</i>	<i>Bangladesh</i>
Percentage of gross domestic product spent on health	4.9	3.8
Percentage paid privately	75	64
Per capita out-of-pocket expenses	INR 1 540 (US\$31)	Tk 487 (US\$7)

21.3

Setting assumptions

The assumptions underlying a risk premium calculation may seem intricate but are actually limited to the frequency of the risk events, distribution of claims costs and characteristics of the insured population. The assumptions on which risk premiums are usually based – maturity of the scheme, controls, size of the portfolio and diversification of the risk – are often not met. Because of the dynamic nature of the underlying risks, actual experience will probably be different from the underlying assumptions. The aim of a pricing exercise should include minimizing frequent and significant adjustments in the risk premiums presented to the target customers. This section suggests areas for consideration when setting assumptions supporting risk premium calculations so as to avoid disruptive premium adjustments.

When setting assumptions, the pricing specialist should consider the time horizon over which the risk premium will be valid and the trends of factors that affect claims frequency and severity. For example, the initial claims frequency for a health scheme may be low immediately following the launch of the product, due to poor awareness of the claims procedure. Later, it may rise sharply as policyholders become better educated in the claims procedures and gain the confidence to access health care. In this case, if the assumption is reviewed on the basis of first observations, the risk premium will not be sufficient to cover the actual outlay over time. To achieve sustainability in the medium to long term, assumptions should include some element of trends in expected experience that may vary over time.

The risks covered by a product sold in a small geographical area may be correlated. The target customers may be exposed to the same risks. For example,

a natural disaster could hit the area and trigger many health or livestock claims. At inception and depending on the distribution and risk-carrying model, this correlation may adversely affect any pricing. Rather than further loading the risk premium, an appropriate reinsurance cover may help maintain the premium at an affordable level. Reinsurance will of course come at a cost; however it may be necessary to make the scheme viable over the long term.

More so for microinsurance than for mainstream commercial insurance products, pricing is very dependent on the approach taken to acquaint the market with the use of the product and to administer and manage the product. Mandatory cover that is poorly communicated to the insured often results in low claims ratios. In contrast, if a healthcare provider is involved in an insurance programme, the over-provision of services may be observed if proper control is not in place. To improve access and client value, some fraud control mechanisms are adapted for microinsurance. These different implementation approaches and control mechanisms could potentially impact pricing and must be taken into account when setting assumptions.

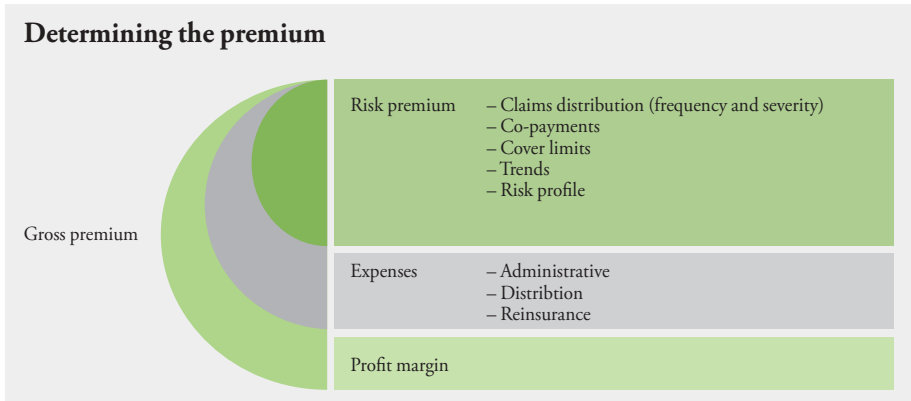
The pricing specialist should check the initial assumptions against the qualitative information for plausibility. For example, even if there are public clinics accessible by the target population, sick low-income workers might not take a day off from work to see a doctor because they would lose income. A worker might wait until the condition becomes severe before seeking help. Furthermore, cover by an insurance product may affect the behaviour of the worker. The pricing specialist should take account of such factors observed during exchanges with the target population and anticipated behavioural changes in the frequency and severity assumptions. Besides the possible low number of policies sold at the initial stages, which leads to variability in experience data, the lack of information also creates greater uncertainty for the pricing specialist. It is therefore even more difficult to assess expected loss and predict financial results.

Once again, when setting assumptions, the pricing specialist needs to remember that affordability is a major constraint under which they will have to work. When serving customers at the BoP, it is critical to give ethical business practices priority over conservative pricing.

21.4 Determining the premium

The premium essentially includes three components – a risk premium equating to expected claims; 2) operating expenses; and 3) a profit margin – as illustrated in Figure 21.2.³ This section considers these three items, and other pricing considerations, in more detail.

Figure 21.2



21.4.1 Calculating the risk premium

Once assumptions have been set for the expected frequency and severity of claims, the risk premium can be calculated, taking into consideration the items. The risk premium represents the expected cost of claims over a specific period and, in its simplest form, is calculated using the following formula, as illustrated in Table 21.3.

Risk premium = expected claims severity X expected claims frequency.

Table 21.3

Sample risk premium calculations

Life product	Benefits (severity)	10 000
	Expected death rate (frequency)	5%
	Risk premium	$10\,000 \times 5\% = 50$
Health product	Treatment costs	2 levels: 5 000 or 10 000; 75% of the time, the incurred cost is 5 000; 25% of the time 10 000
	Frequency	4 per cent
	Risk premium	$(5\,000 \times 75\%) + (10\,000 \times 25\%) \times 4\% = 250$

³ In this chapter, the term “premium” is used to refer to gross premium; the “risk premium” is specifically referred to as such when applicable.

Because of severe data limitations and the inherent uncertainty in quantifying the underlying risk, the pricing specialist should not over-engineer claims distribution modelling. The pricing specialist needs to provide a best estimate, taking into account the particularities of the context while being aware of the limitations of the initial set of assumptions.

21.4.2 Calculating the expenses

Once a risk premium has been computed, an expense ratio, usually stated as a percentage of the risk premium, is then set. This expense ratio usually covers product sales and distribution costs, cost of administration, reinsurance and other expenses. The costs related to microinsurance distribution and administration are significantly different from mainstream insurance products. Efforts to educate the BoP about the use of insurance as a risk management tool, developing unconventional distribution channels, and servicing scattered and remote populations may all contribute to the higher costs for microinsurance.⁴

As part of the pricing exercise, the cost implications of the particular administrative set-up supported by processes applicable to the product should be quantified. A cost-benefit analysis of the processes should be undertaken to identify cost drivers and take-up drivers. For example, a communication strategy may be expensive to implement, but could greatly increase take-up and improve financial results. If the cost of administration is substantial, alternatives should be explored, such as innovations through technology (*see Chapter 24*) and simplifications of processes (e.g. paperwork, authentication, validation). Then, the project team should suggest alternative approaches and work with the pricing specialist to assess the effect on pricing and financial results.

In addition, there may be specific regulations that need to be considered, such as restrictions on commissions for microinsurance agents. The specific regulation and actual remuneration costs must both be taken into consideration when determining the expense ratio.

In aggregate, these expenses may represent a large percentage of the gross premium and they must therefore be monitored. The accounting system used by the provider should ideally be adapted to allocate expenses to product lines and facilitate the split into the various categories outlined above. The implementation and management of a microinsurance scheme has a great impact on expenses and financial results, as illustrated in Box 21.4. The review of these expenses is an integral part of the subsequent pricing and product review. The expense ratio should be reviewed and the administrative practices should be improved to reduce expenses to reasonable levels, ideally below 30 per cent of gross premium.

⁴ For further details on distribution and administration costs, see McCord et al., 2006.

*Box 21.4***Processes influence expenses**

The amount of expenses varies greatly from product to product and depends on the processes used. For example:

- 1) An endowment product in West Africa has total expenses and commission of 7.1 per cent of premium. There was an effort to improve the efficiency of the manual process through automation with the expectation of reducing expenses to 4 per cent.
- 2) In many health schemes, expense levels as high as 30 per cent of premium have been observed.
- 3) Membership cards may be issued to identify members of a health microinsurance programme and streamline claims processing. This is a way to store information, authenticate membership and potentially reduce fraud. The card, whether equipped with a chip or a magnetic strip or photo, may have a low cost (under US\$1). While this expense would represent a small percentage of the premium for a mainstream individual policy, it could be a significant portion of, for example, a policy with a premium of US\$12 per annum.

21.4.3 Profit margin

For long-term viability, besides taking into account administration expenses, all microinsurance products must have a profit margin. But what is a reasonable profit? This should be calculated on the basis of the risk and capital required. For most products, such calculations would yield a range of profitability from 2 to 10 per cent of gross premium, which is a reasonable return on risk-based capital requirements. A principle of serving the BoP is that profits from the low-income market should be based on high volume rather than high margins. This is a point to be taken into consideration, as the microinsurance provider builds profit margins into the premiums of the products it offers.

21.4.4 Other pricing considerations*Community pricing*

While customer-based segmentation and understanding the differences in the risk profiles of the individuals in a target segment are important, an overriding objective is to offer insurance protection at a fair, affordable and adequate price to a large number of low-income people. Community pricing, similar to pricing for a group policy, is the preferred approach for three main reasons:

- **Financial inclusion:** Financial protection should be accessible for a large number of people who are currently underserved and under-protected. If risk

premiums are actuarially determined for each sub-group of a target population, some sub-groups may not be able to afford the product. Cross-subsidization is therefore acceptable as long as anti-selection does not become a threat to the scheme's sustainability; for example, the older cooperative members could be excluded (de facto or due to higher premiums) from a life insurance cover if pricing is not on a community basis.

- **Simplicity:** A simple premium structure will be easier to administer, and easier to explain to the target population, thus increasing understanding of the product, which may lead to higher take-up.
- **Scale:** If a large number of people purchase the product because of its affordability and simplicity, then it will be easier to spread fixed costs and make the scheme more sustainable in the long term. If scale is achieved, uncertainty as to pricing and other financial criteria is reduced.

In the long run, community pricing permits better development objectives and allows the risk carrier to achieve scale and better profitability. The shortcomings of community pricing can be mitigated with underwriting rules (e.g. eligibility conditions). While pricing is conducted at community or group level, factors such as age and gender should be taken into account in the detailed analysis and monitoring of the results. Analysis at a more granular level ensures that there is no anti-selection and that the risk premium remains fair.

Scenario analysis and reasonability checks

Once a premium has been calculated, a sensitivity analysis testing the impact of variations in a single assumption can help identify the variable to which the financial performance of the product is the most sensitive. Since the financial results will vary depending on take-up, the maturity of the scheme, the behaviour of the population and the uncertainty related to these factors, different experience scenarios should be explored to understand the range of possible financial outcomes for the scheme priced.

Once the pricing specialist has produced a suggested premium, it should be checked against the ATP and WTP to ensure that it is reasonable. A major challenge for the project team is to offer protection that matches the needs of low-income households at an affordable premium that covers claims, other expenses and any reserving requirements and profit margins required for the product to be sustainable. It is likely to take several iterations of the pricing process to reach an acceptable balance so that it is valued by and affordable for the customers. To do so, it may be necessary to review the product design by reducing or changing the benefit structure to make the product more affordable, or exploring scheme implementation and process improvements.

21.5 Monitoring and evaluating product experience

Once the product is ready for launch, it is essential to set up a management information system (MIS) to collect data on actual claims and expense experience so that the assumptions, premium, product features and processes can be improved. This will support the close monitoring of initial assumptions against actual experience so that necessary pricing adjustments can be made when appropriate. The data should include demographic details of the insured, claims submitted and the product's financials so that key performance indicators (KPIs) can be computed and further analysis undertaken. The sensitivity/scenario analysis undertaken in step three of the cycle will highlight which of the KPIs require monitoring on a regular basis (i.e. those to which the financial viability of the product is most sensitive). It is very important to continuously monitor claim patterns and investigate anomalies. This exercise can be supported by an MIS and an accounting system that is sufficiently robust and well-managed to enable all administrative processes to be monitored.⁵

21.6 Refining the premium

Premiums should be adjusted over time on the basis of sufficient observations. While mainstream insurance companies usually have large portfolios, with the take-up for a single product reaching hundreds of thousands, a microinsurance product may not reach critical mass in its early years, depending on the country and the distribution channel used. Take-up is often limited at inception of a scheme, since a major communication effort is required to create awareness and educate a target segment that is unfamiliar with insurance. Initial low take-up will have an impact on the following:

- **Frequency of claims** may vary from period to period, but the intrinsic frequency that represents an average over several periods may remain the same. Therefore, this assumption should be based on a long-term expectation and adjusted when sufficient credible evidence suggests a material change.
- **Administration expenses:** If the number of policies sold is low, the amount of fixed expenses allocated amongst these policies will be high. However, in the long term the fixed expense amount allocated to each policy should decrease as sales increase. High administrative expenses increase the premium, thus reducing affordability. Therefore, an average long-term expected expense ratio should be used from the launch of the product.⁶

⁵ See Wipf and Garand, 2010; and Wipf and Garand, 2006 for more details.

⁶ The start-up cost should be amortized over a suitable period.

- **Marketing and distribution expenses** allocated per policy will be higher in the start-up years because of the small number of policies sold. Education and awareness costs may also be higher in the early years, as efforts to educate the population are the key to generating sales. Similar to the administration expenses, these should be amortized over the expected life of the product line or, for example, five years.
- **Credibility of data/experience collected:** A small sample of claims and insureds does not carry much credibility. Adjusting assumptions too soon or on the basis of a small sample may lead to other errors. Assumptions on claims costs should be reviewed only once sufficient experience data has been gathered. Observed experience may differ from assumptions, but this should not necessarily lead to a pricing or assumption adjustment because, for low-incidence events, a large amount of data is required.

In addition to a quantitative experience analysis, feedback from key field staff on the product and the processes related to both its distribution and service could lead to product and process refinements that in turn change the premium. Interviews with insureds and potential clients may also help verify the experience and perception the target population has of the product.

21.7 Summary example

To illustrate the pricing cycle and the challenges of pricing with limited data, this section provides two actual examples from the same country, described in Boxes 21.5 and 21.6.

Box 21.5

Pricing: Organization A

Organization A delivers rural support services throughout the country. In collaboration with an insurer and with minimal direct input from its members, Organization A developed and provided its members with a mandatory cover for a premium of US\$1.18 plus a fee to cover administration expenses. The plan covers individuals from age 18 to 65 with a maximum hospitalization benefit of US\$294; maternity is excluded.

Box 21.6

Pricing: Organization B

Organization B focuses on one region of the country and has sister organizations providing microfinance, health services and technical support in agriculture. The organization conducted research on client needs, obtained expert assistance with product development and process set-up, found an insurance partner and set up back-office operations to manage the scheme. A voluntary health insurance scheme is offered to a village on the condition that 50 per cent of the village participate. Participating families are required to insure all the members of the household. The scheme provides insured members of all ages with a cashless hospitalization benefit of US\$400, maternity cover, outpatient consultation vouchers and a life insurance cover of US\$350 per insured.

Organization A has experienced incidence rates of below one per cent and an average claim of US\$140 for several years. However, contact with the members has suggested that they are unaware of this health insurance cover and do not understand how to access healthcare services. Furthermore, the reimbursement basis of claims settlement may be an obstacle to members' obtaining service.

Organization B, on the other hand, has a different set of issues. It had initial assumptions, as summarized in Table 21.4.

Table 21.4

Organization B, expected health claims

	<i>Incidence (%)</i>	<i>Average claim (US\$)</i>	<i>Risk premium (US\$)</i>
Non-maternity	3.60	51.44	1.85
C-section	0.33	209.50	0.69
Normal delivery	1.87	29.19	0.55
Total			3.09

While actual average claims experience was within 4 per cent of expected average claims for the first year and within 20 per cent for the second year, actual incidence experience was materially different:

Table 21.5

Organization B, incidence results

	<i>Expected (%)</i>	<i>Actual year one (%)</i>	<i>Actual year two (%)</i>
Non-maternity	3.60	9.40	9.70
C-section	0.33	0.40	3.00
Normal delivery	1.87	2.80	4.90

What were the reasons for the divergence in experience for Organization B? There seem to be two principal issues:

- 1) The expected community solidarity did not materialize. The target population reached was only 3 per cent, indicating a severe case of adverse selection.
- 2) The health service providers probably over-provided and over-charged. About 54 per cent of the claims were for one-day stays. The average cost per claim for maternity was higher than in other regions in the area. The health providers admitted to an external party that the health insurance scheme was a money-maker.

The main point illustrated by these two examples is that schemes can experience a huge divergence between actual experience and expectations if they do not:

- take steps to understand the target market;
- develop suitable processes to service the product; and
- educate the client on the use of the product.

However, failure to implement and manage a needs-driven product in a thoughtful manner could also contribute to the divergence of experience from assumptions. Furthermore, the pricing specialist cannot infer assumptions for a specific situation from the experience of another without considering the differences in context, implementation and management. As demonstrated by these two examples, similar products can have very different experiences even if they are offered in the same country.

Lastly, the pricing exercise must consider how various stakeholders, including the insureds and the service providers, will respond to the scheme so that experience does not diverge drastically from expectations. This also indicates the importance of managing and monitoring experience so that corrective action can be taken.

21.8 Conclusion

This chapter has focused on pricing insurance products for low-income markets, including the basic pricing process and the importance of engaging a trained specialist to carry out the exercise. Microinsurance providers should seek pricing experts (whether internal or external) to ensure that the premium is appropriate and that processes and product features are adequate to achieve sustainability and offer insurance services of value to the client. Those experts must understand how the design and implementation of the product and supporting processes, as well as market behaviour, affect pricing.

Initial assumptions and the premium will not be perfectly accurate. Because of severe data limitations and the inherent uncertainty in quantifying the underlying risk, the pricing specialist should not over-engineer claims distribution modelling. The pricing specialist needs to provide a best estimate, taking into account the particularities of the context while being aware of the limitations of the initial assumptions. Data gaps need to be identified so that the project team can systematically work towards filling them after the product has been launched.

Since pricing results are only as good as the data and assumptions fed into the exercise, the pricing specialist must ensure that the project team and key stakeholders work through the iterations of the pricing cycle. This can help improve the quality of the data gathered, the implementation of improvements and communications to the market.

For actuaries, pricing with little data in new markets may be a new challenge. Actuaries can contribute by first getting to know these new markets, understanding the culture and learning to go back to the basics. In addition, actuaries can lend a hand by:

- building the insurance capacity of the developing market players, for example by improving the financial statements to enable managers to focus on key issues;
- providing technical assistance in MIS development for microinsurance projects, focusing on capturing the essential data and gathering the information needed to manage the product (with an eye for collection of the correct amount of data – not too much or too little);
- facilitating the gathering and sharing of data at industry level until sufficiently robust databases have been developed; comparing schemes and helping implementing organizations to understand their performance compared to the best-performing plans;
- analysing trends and drawing lessons for the microinsurance community; and
- providing technical assistance/seminars on reserving and reinsurance.