

# PERFORMANCE INDICATORS FOR MICROINSURANCE

A Handbook for Microinsurance Practitioners

By John Wipf and Denis Garand



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<b>Indicator</b>	<b>Basic formula</b>	<b>Page</b>
1. Net Income Ratio	Net Income Ratio = Net Income / Earned Premium	p. 17
2. Incurred Expense Ratio	Incurred Expense Ratio = Incurred Expenses / Earned Premiums	p. 21
3. Incurred Claims Ratio	Incurred Claims Ratio = Incurred Claims / Earned Premiums	p. 23
4. Renewal Rate Ratio	Renewal Rate Ratio = Number of Renewals / Number of Potential Renewals	p. 25
5. Promptness of Claims Settlements	Select only claims that have been processed and paid from the entire set of claims for a period, and apportion this set of paid claims in terms of the number of days that it took to pay each claim, according to a defined schedule	p. 28
6. Claims Rejection Ratio	Claims Rejection Ratio = Number of Claims Rejected / All Claims Reported	p. 31
7. Growth Ratio	Growth Ratio = (Number of insured n – Number of Insured n-1) / Number of Insured n-1	p. 33
8. Coverage Ratio	Coverage Ratio = Number of insured n / Target population n	p. 36
9. Solvency Ratio	Solvency Ratio = Admitted Assets / Liabilities	p. 38
10. Liquidity Ratio	Liquidity Ratio = Available Cash or Cash Equivalents / Short-term Payables (3 months)	p. 40

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## INTRODUCTION

Microinsurance is regarded by some as a risk management mechanism that the poor can use to compensate for the lack of appropriate state-sponsored social protection programmes. Alternatively, it is viewed by others as an opportunity to provide financial services to the low-income market at a profit<sup>1</sup>.

Regardless of where the emphasis is placed, all microinsurance programmes should aim to become viable since donor or government subsidies are only temporary or not available. Without subsidies, all programmes are subject to the same economic and market forces as mainstream businesses, and this requires them to be managed professionally. Management goals, however, cannot be achieved without constant monitoring and transparent measurements of performance.

In October 2006 ADA and BRS in collaboration with the CGAP Working Group on Microinsurance organised the first of two workshops in Luxembourg for microinsurance practitioners and experts from around the world with the aim of sharing experiences and initiating discussions about measuring microinsurance performance. The workshop was concluded with the selection of eight key principles and ten key performance indicators which were then described and briefly discussed in a workshop report<sup>2</sup>. Twenty participating organisations (practitioners from Asia, Africa and Latin America) also provided data from their operations which was used to discuss the indicators.

In July 2007 a second workshop was held to confirm the selected principles and indicators and to test them further with a second round of data provided by the participating practitioners. For this purpose, BRS developed a microinsurance factsheet which together with this handbook will be packaged as a toolkit that will enable practitioners to use the indicators in their organisations. The workshop concluded with a recommendation of a ninth principle as well as some candidate measures to be considered for social performance indicators.

The key principles and indicators that were established during these workshops are applicable to all microinsurance providers, irrespective of legal structure, environment, organizational setup and type of microinsurance product offered, although there may be some differences in performance and interpretation. With the involvement of a diverse group of microinsurers, as well as the CGAP Working Group on Microinsurance, we are ensured that a new standard is set for the entire microinsurance industry.

To illustrate some of the indicators, we used the data from the participating organisations in the 2007 workshop. Throughout the handbook and as requested, an alias name will be used for the organisations. Sample performance will be showcased for each indicator to help understand issues and challenges in calculating them.

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1 Churchill, C., 2006: What is insurance for the poor? In Churchill, C. (ed.): Protecting the poor: A microinsurance compendium. Munich Re Foundation/ILO, Geneva, p. 15.

2 The workshop report is available at [www.microfinance.lu/comas/media/onlineindicatorsws.pdf](http://www.microfinance.lu/comas/media/onlineindicatorsws.pdf)

Sample Overview

Name	Organisational type and programme	Product type and approximate insured (2006)
ALPHA	<ul style="list-style-type: none"> <li>• Network of rural financial institutions- credit unions, co-ops, rural banks etc.</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Individual life</li> <li>• 15,000</li> </ul>
BETA	<ul style="list-style-type: none"> <li>• Bank engaged in microfinance and microinsurance</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group life, health, accident</li> <li>• 85,000</li> </ul>
GAMMA	<ul style="list-style-type: none"> <li>• Source of members are the clients of an affiliated bank and NGO, both MFIs</li> <li>• Member-owned, self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit-life, life, limited health, pension</li> <li>• 400,000+ families, over 1m covered persons</li> </ul>
EPSILON	<ul style="list-style-type: none"> <li>• Technical services provider for MFI owned by six credit union networks</li> <li>• Technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit-life</li> <li>• 65,000</li> </ul>
ZETA	Commercial insurance company mainly targeting the middle to lower income market	<ul style="list-style-type: none"> <li>• Individual endowment life (with additional benefits)</li> <li>• 1.1m policyholders</li> </ul>
THETA	<ul style="list-style-type: none"> <li>• Mutual</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group health, life &amp; disability, livestock, crop, house</li> <li>• 3,500 insured</li> </ul>
IOTA	<ul style="list-style-type: none"> <li>• Network of credit unions</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual credit-life</li> <li>• 36,000</li> </ul>
KAPPA	<ul style="list-style-type: none"> <li>• MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group life</li> <li>• 85,000</li> </ul>
LAMBDA	<ul style="list-style-type: none"> <li>• NGO focused on health</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (with personal accident benefit)</li> <li>• 3,655</li> </ul>
NU	<ul style="list-style-type: none"> <li>• NGO</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (prevention, pharmacy and maternity)</li> <li>• 364</li> </ul>
OMICRON	<ul style="list-style-type: none"> <li>• NGO</li> <li>• Partner - agent</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• 1,767</li> </ul>
PI	<ul style="list-style-type: none"> <li>• NGO focused on community development</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual Health</li> <li>• 76,500</li> </ul>
RHO	<ul style="list-style-type: none"> <li>• Second level cooperative organisation</li> <li>• Partner - agent</li> </ul>	<ul style="list-style-type: none"> <li>• Life, health, accident marketed and managed individually but under several group contracts</li> <li>• 16,000 covered</li> </ul>
SIGMA	<ul style="list-style-type: none"> <li>• For-profit MFI</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit life</li> <li>• Nearly 1m borrowers and their spouses</li> </ul>
TAU	<ul style="list-style-type: none"> <li>• NGO / MFI</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group health and funeral, pensions</li> <li>• 16,051</li> </ul>
UPSILON	<ul style="list-style-type: none"> <li>• NGO / MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual life, health, assets</li> <li>• 10,811</li> </ul>
PSI	Commercial insurance company mainly targeting higher and middle income market, with a relatively small microinsurance programme	<ul style="list-style-type: none"> <li>• Individual term life, endowment</li> <li>• 120,000</li> </ul>
OMEGA	<ul style="list-style-type: none"> <li>• Development NGO / MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group life, health</li> <li>• 7,455</li> </ul>

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This handbook is structured as follows: Chapter 1 MEASURING PERFORMANCE IN MICROINSURANCE describes nine principles and ten key indicators. Much of the content in the 2006 workshop report is included with additional comments and feedback from the workshop participants. Chapter 2 MEASURING PERFORMANCE: INTERPRETATION ISSUES focuses on some of the special considerations to be given in evaluating performance for certain products and for the partner-agent model. Chapter 3 on BENCHMARKING introduces the subject of benchmarking while Chapter 4 explores the topic of SOCIAL PERFORMANCE.

This is the first complete version of the handbook, but updates will be made when new data becomes available.<sup>3</sup> It is intended to be brief and not an exhaustive treatment of evaluating microinsurance performance. Throughout, the common distinction between life and non-life was dropped in an attempt to generalize the discussion with some specific illustrative examples and special cases taken up where warranted. The main emphasis is on life and health products since these are by far the most common today.

#### **Box 1: Performance indicators toolkit**

This handbook, together with the microinsurance factsheet, forms the toolkit “Performance Indicators for Microinsurance.” Both tools have been developed together based upon the input and feedback of the microinsurers that participated in the 2006 and 2007 workshops. Both tools complement each other and are designed to be used together.

The microinsurance factsheet is an Excel workbook that compromises the financial statements adapted for microinsurance practitioners. Based upon these statements, the ten key performance indicators that are described in this handbook are calculated. This handbook complements the factsheet by assisting the reader with the interpretation of the obtained results.

The latest version of the Microinsurance Factsheet can be found at [www.brs-vzw.be/factsheet](http://www.brs-vzw.be/factsheet)

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3 Given the importance of the subject, we would like to invite you to read and use this handbook and factsheet, and contribute to this project by sending your comments and feedback to [insurance@microfinance.lu](mailto:insurance@microfinance.lu)

## 1. MEASURING PERFORMANCE IN MICROINSURANCE

This chapter contains definitions, formulas, descriptions, interpretations of the ten key microinsurance performance indicators. Where possible, some preliminary exhibits and discussion of industry performance with regards to each of the performance areas are presented.

Throughout, the reader should keep in mind that these key indicators are meant to be monitored by management on a regular basis and in themselves do not tell the whole story; they are just key indicators and not the entire set of possible indicators. Each of them can be expanded into one or more sub-indicators which will provide additional details. For example, the incurred claims ratio indicator can be broken down into several sub-indicators including the “incidence per risk exposure” and the “average claims amount” indicators. Additional indicators can also be added if desired to measure operational areas that are not yet covered.

Unlike microfinance, there are often multiple partners involved in implanting a microinsurance programme. As well, product diversity and complexity is generally greater than in microfinance. This complicates the discussion somewhat since performance must be measured across multiple partners and delivery modes as well as a variety of product lines. As discussed in Chapter 3, this diversity also makes benchmarking and comparing performance for microinsurance more challenging than in microfinance.

**The main emphasis of this handbook is to review performance from the point of view of the consumer of the product or service, i.e. the insured client or member.** As Principle 9 describes, the microinsurance programme should be at the service of the insured member or client, and from that perspective, it makes sense to compare performance to that of others with a view to become more efficient<sup>4</sup>. For programmes with multiple partners, this also implies that performance will be viewed as a whole without focusing on a specific partner.

Some microinsurance programmes are member-owned schemes while others are not. In the first case, the insured are called members and in the latter case they are regarded as clients. The term “insured” is often used to mean either a member or a client.

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4 Viewing performance from this perspective is also the most meaningful for commercial businesses operating in a free market economy since in the end, good performance and greater efficiency boils down to delivering the best goods and services in the most economical way to the consumer.

## 1.1 THE KEY PRINCIPLES

This chapter describes nine key principles regarded as an integral part to the management of a microinsurance programme. In a sense, these can be viewed as “a priori conditions” or assumed requirements without which transparent and accurate performance measurement is impossible.

### The nine key principles are:

1. Separation of data
2. Collection of relevant and accurate data
3. Production of financial statements
4. Calculating and setting up reserves
5. Efficient and continuous claims monitoring
6. Clear investment policy
7. Technical insurance capacity
8. Transparency
9. Client focus

### Principle 1: Separation of data

The business of microinsurance is very technical and grounded on fundamental principles and statistics. Long term success requires good management performance in several key areas including product design, risk and investment management, quality servicing, efficient distribution, and accurate pricing. To perform consistently well in all of these areas, managers need relevant and reliable information extracted from quality data generated by the microinsurance operations. It follows that one of the key functional units that should be developed early on is a competent data department skilled at developing systems and data management<sup>5</sup>.

Many organisations provide services other than microinsurance, and although the activities of delivering multiple services may be integrated, microinsurance data must be captured in such a way that it can be easily separated from data generated by non-microinsurance activities. Separate accounting for microinsurance and other activities such as microfinance will enable isolated measurement of financial performance for each activity. For small-scale microinsurers, reasonable estimates of part-time staffing costs and use of other resources may be sufficient; however, larger-scale microinsurers with fulltime dedicated staff should account for actual salaries and all other associated costs of running the programme.

The principle also extends to maintaining separate data for each product as this enables calculations, monitoring, management, and performance indicators evaluation for each product. Isolating performance of products facilitates analysis and enables a more specific management response. Sometimes, the results of a poorly performing product can be masked by the stellar performance of a companion product. To identify this requires analysis of product-specific data. Until a microinsurer can do this, it is unlikely it will realize its full potential.

5 Garand, D. and J. Wipf, 2006: Pricing microinsurance products. In Churchill, C. (ed.): Protecting the poor: A microinsurance compendium. Munich Re Foundation/ILO, Geneva, p. 240.

### **Principle 2: Collection of relevant and accurate data**

Principle 1 establishes solid reasons for separating microinsurance data from the rest of an organisation's data. Since the insurance business in general is centered on cumulative statistics extracted from its experience data, robustness and relevance of collected data is essential. Databases should be designed with inputs from various professionals including an actuary and programme managers to ensure that the technical information required for pricing, calculating reserves, and operational management is captured adequately for each product.

Although most microinsurers do not collect sufficient or the right kind of data, there are some that collect too much data. There is a trade-off between the cost of collecting additional data and the incremental gains from the added information. Too much data collection can be costly whereas insufficient information will impair management capability and the evolution of the business. Depending on the organisation, adequate management information systems can range from a series of simple cumulative spreadsheets to elaborate custom-built administration systems or comprehensive financial accounting software spanning all departments.

A bad practice of many microinsurers is to delete data records of policies or certificates that have expired or when members drop out of the programme. Data should be kept indefinitely in archives since it will be useful to analyse the history at a later point. Another common mistake is to keep running totals of key figures such as premium payments instead of maintaining complete individual transactional histories. Without them, it is usually impossible for the pricing actuary to reconstruct a history of risk profiles to match up with a claims database for purposes of pricing products.

The accuracy of data is an important component of this principle. Many organisations accumulate voluminous databases but do not invest enough in ensuring that the data is useable and accurate. Systems should be designed to control and edit data upon entry; simple drop-down menus, for example, increase the accuracy and the speed of data entry. Software applications should be added to the system to periodically analyze database consistency based on the history of business rules. Data must be managed well just like any other valuable resource.

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### Principle 3: Production of financial statements

One should be able to produce for any microinsurance programme the following financial statements based on its activities:

- a) Income Statement (also called Profit and Loss Statement);
- b) Balance Sheet;
- c) Cash Flow Statement (also called Sources and Uses of Funds).

There are variations in the way financial statements are prepared in different regions of the world. For example, in many French-speaking countries the format is quite different from that used in other countries such as the United States<sup>6</sup>. Regardless of the format, there are minimum standards expected to be incorporated:

- a) Microinsurance information is separated from that of all other activities;
- b) Information is segmented for each microinsurance product;
- c) Information is based on accurate and audited databases;
- d) Accrual accounting method is used, recognizing earnings, expenses, reserve increases, and claims as these are incurred;
- e) Statements are produced at least quarterly;
- f) Statements are produced in a timely manner, e.g. within a pre-determined number of days after the accounting period has ended;
- g) Net income is shown prior to non-permanent subsidies (i.e. subsidies that are temporary and expected to end in future periods); and
- h) Reserve levels (see definition in Principle 4) are recognized as liabilities on the Balance Sheet and reserve increases as expenses on the Income Statement.

The financial statements prepared accordingly are required by Management to get a punctual overview of the scheme's performance, but the statements may also need to meet some additional regulatory requirements and standards.

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6 The microinsurance factsheet can be used as a model for the Profit and Loss and Balance Sheet.

#### **Principle 4: Calculating and setting up reserves**

In general, a “reserve” in this handbook should be regarded as a fund or an accounting provision which is set aside to fund the future net liabilities of a microinsurance programme. It would be rare to find a programme that does not require reserves. In some cases such as for a partner-agent model, NGOs or agents usually do not require reserves, but the insurer covering the risk is required to set up the appropriate reserves in order to answer its future obligations and to measure the financial state of the programme for a particular accounting period. Similarly, a stand-alone risk-bearing microinsurer must calculate and set up reserves.

The comprehensive technical definition of a reserve is **actuarial present value of future liabilities less actuarial present value of future premiums**. In essence, it is an amount representing actuarial present value of actual or potential liabilities of an insurer to its policyholders. Exact reserves are very difficult to determine in most cases as their calculation is based on complex actuarial mathematics. In practice, simplified methods and tools that follow accepted actuarial standards are used. It is important to ensure that the methodologies employed accurately measure any outstanding liabilities at the end of each accounting period. Reserves should adequately cover the expenses and benefits payable due to expected events and include some margins for most of the unexpected events as well. Reserves for long-term products should be calculated directly by an actuary.

Some of the generally accepted simplified reserves for life and health products are the Unearned Premium Reserve (UPR), Incurred But Not Reported Reserve (IBNR), and Claims in Course of Settlement (CICS). To temporarily retain profits or to absorb statistical fluctuations in claims, some programmes set up a Contingency Reserve (CR). The level of reserves varies depending on the type of microinsurance product, on its design and features, and on how the microinsurer is implementing it. For example, reserves for a life microinsurance product are not the same as the reserves needed for a health microinsurance product, while identical products carried by two different microinsurers may require different reserve levels because of their differences in management style or their approaches to distribution.

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## Principle 5: Efficient and continuous claims monitoring

To determine if a microinsurance organisation adequately monitors its claims, the following aspects should be considered:

- a) Does the organisation **continuously** monitor all of its claims?
- b) Is there a focus on detecting developing trends and patterns in claims?
- c) Can the problems in monitoring claims be identified? What kinds of problems exist?
- d) Does the organisation have a cumulative claims database designed with inputs from an actuary?
- e) Which capacities and tools would be needed to improve claims monitoring?

Claims must be carefully monitored in order to understand the risk profile of the participants, to identify moral hazards and adverse selection, for calculation of claims reserves and for understanding certain aspects of the microinsurance programme. Actual claims should be compared to expected claims by age, gender and other important parameters that were used for setting the premium rates; this will shed light on the accuracy of the pricing assumptions. By studying claims patterns, the approach to pricing may also improve as new and important parameters are identified. This type of monitoring and analysis is important even if the programme is community-rated because the source and patterns of claims must be understood in order to respond to emerging problems.

The analyst should always look for developing trends and claims patterns as these will lead to actionable and better-informed management decisions. Denied claims should be closely examined since these will give insight into how to improve product design and awareness education. Both claims incidence (frequency) and claims amount must be separately monitored, which will be discussed in more detail later in this chapter.

There are many important attributes (data elements or fields) that every claims record must have. While the data requirements will vary by product, all claims records should at least contain the following attributes:

- a) Incurred date: When did the event that led to the claim occur?
- b) Reported date: When was the claim reported to the microinsurer?
- c) Payment date: When was the claim finally settled or rejected?
- d) Cause: What was the cause of the claim? (I.e. cause of death / disability / sickness / cause of property damage, etc.) For health claims, the condition or type of sickness should also be tracked, at least by major category such as malaria, etc.
- e) Who is the insured person making the claim? (From this, the details of the claimant can presumably be retrieved from the microinsurer's database).
- f) What were the incurred costs? It is not enough to record the claims amount that was eventually paid. Incurred cost data is especially important for health insurance since it can be used to enhance products and to determine appropriate co-pay and benefit maximum schedules. For health insurance, incurred costs should be further broken down into a detailed schedule of medical procedures.

**Principle 6: Clear investment policy**

A microinsurance organisation should have a clearly defined and prudent investment policy with the following characteristics:

- a) It should be a formal investment policy;
- b) For products with a term of over one year, the investment of reserves is structured to match liability projections;
- c) The investment policy has clear rules on asset diversification;
- d) The policy has set limits on the proportions that can be invested in each major asset class;
- e) The policy has set limits on the proportion and amounts that can be invested in a single asset or organisation; and
- f) The investment policy specifies the minimum investment grade for each asset class.

For some microinsurance products, especially those with longer duration or with a significant savings component, the viability of a scheme rests heavily on the investment management decisions of the accumulated premiums.

An investment policy should at least address the following issues: asset quality (grade of investments), asset diversification, and asset-liability matching for long term products. The first issue is especially important if the microinsurer has substantial accumulation of assets for backing liabilities of long term products or has had a grant to set up capital. Moreover, asset diversification measures aim to prevent a concentration of invested assets; however, the potential to diversify will depend on the country-specific situations. Having all investments concentrated in a single source or asset class represents a potential problem. As a general guideline and standard, real estate should not exceed ten percent of invested assets. Asset-liability matching should be practiced for longer term products since a significant mismatch can bankrupt the organisation. It is also necessary to monitor and manage cash flows efficiently.

## Principle 7: Technical insurance capacity

The following are important considerations that would help determine if gaps exist in the organisation's technical capacities and whether it could benefit from expert intervention:

- a) How often are internal and external audits conducted?
- b) How does the Management Information System (MIS) compare to the suggested minimum standard (see below)?
- c) What types of information is the MIS capturing or not capturing?
- d) Aside from accumulation of data, what types of applications does the MIS provide?
- e) What is the source and content of management and staff training on microinsurance?
- f) How many of the six first principles are not being met due to lack of technical capacity?

Most practitioners are new to the insurance business and enter without proper preparation and training of insurance principles, risk management, investment management, and other important technical areas. Insurance is a very technical business and requires an in-depth understanding and appreciation of the principles upon which it is grounded as well as good and bad management practices. This is especially true for self-insured schemes; for partner-agent setups the insurer can (and should) provide training and technical support.

Technical support can be funded by donors, government grants, or by insurers. Any weak areas should be addressed: marketing, insurance fundamentals, risk management, assistance with audits<sup>7</sup>, underwriting, staff development, and so on.

To develop a successful microinsurance business and to achieve most of the principles that have been discussed above requires a comprehensive, quality MIS which must include: (1) a relational database in normalized form<sup>8</sup>; (2) applications developed for claims monitoring and performance indicator evaluation; (3) applications for financial and risk management. As already stressed in Principle 2, it is important to design the MIS with the help of an actuary to ensure that the data captured will be useful for periodic pricing review of products. Actuarial programmers can also develop applications such as reserve calculations and reinsurance.

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7 Internal audits will reinforce the overall control of the structure and should be conducted frequently; for example, quarterly. External audits are equally necessary but may be conducted less frequently; perhaps once a year.

8 In relational database theory, normalization is the process of restructuring the logical data model of a database to eliminate redundancy, organize data efficiently, reduce repeating data, and to reduce the potential for anomalies during data operations. Definition by Wikipedia: [http://en.wikipedia.org/wiki/Relational\\_database](http://en.wikipedia.org/wiki/Relational_database)

### **Principle 8: Transparency**

Every calculation, procedure, data collection, and report should follow the principle of transparency in order to provide valuable and accurate information, to improve processes and increase credibility. This not only means making more data available to a wider spectrum of stakeholders and the insured public, but also making the data more accessible and presented in a more meaningful and understandable language and format. Drowning the public in large volumes of data does not in itself increase transparency.

This principle complements the other principles well since, for example, they promote better accounting standards, timely reporting, use of performance indicators, improved MIS applications and databases, enhanced management capacity, and so on.

Furthermore, evaluating and publishing the key indicators periodically will increase transparency. It is also important for NGOs and others dealing in microinsurance to have clear information available to donors and grantees on their available resources. Subsidies should not be hidden; it is in the best interest of all stakeholders that there is clear economic accounting of microinsurance activity.

### **Box 2: Business planning**

Inherent in this set of nine principles is an assumption that microinsurance managers are guided by a strategic five to seven year business plan which is regularly updated at least every two to three years. Preparing a business plan and managing it accordingly is in itself an important principle that all business endeavours should practice automatically. Strategic business plans are best if prepared interactively with input from all major stakeholders including the entire implementation team since this gives everyone a sense of ownership and a determination to execute the business plan and to achieve its objectives. If an organisation has other businesses or member services aside from microinsurance, the business plan should be a comprehensive one but with a sub-plan for microinsurance. Based on the strategic plan, annual operational plans and budgets can be prepared as a guide for various departments.

All business plans naturally contain performance targets and these should be measured and projected as key indicators from the financials and other sources. As management monitors actual performance, special attention should be given to the variance in actual and projected indicator values.

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### Principle 9: Client focus

The primary purpose of microinsurance is to assist the less privileged although there are some unscrupulous players in the market that clearly exploit it for the benefit of their stockholders. These organisations could score “poorly” if there were a pro-poor scoring system linked to the indicators. As such, a ninth principle was added - **the microinsurer should have a clear, strong, and consistent focus on providing good value and efficient service to the insured client**<sup>9</sup>. This implies that the managers would be keenly attuned to the true needs of the clients. In fact, the mission and objectives of the microinsurance programme should state that the focus is on providing relevant products and services at an optimum and sustainable price. This means that every management decision would always consider foremost the impact of the decision on the client. This principle also reinforces why performance should be evaluated from the consumer’s perspective.

A member-owned microinsurance programme is naturally focused in this way since it is organised by its members and they regularly participate in democratic governance. Conversely, insurance companies and service providers owned by stockholders who demand a competitive return on their invested capital will be focused on profit and less so on optimizing the service to and value for the poor. There are plausible exceptions though, such as in the case where an insurer may regard microinsurance as a pioneering endeavour aimed at gaining trust and confidence of a community and with a follow-up plan of introducing additional services in the future.

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9 This principle was discussed and included as a key principle during the workshop in 2007.

## 1.2. THE KEY PERFORMANCE INDICATORS

Since performance is viewed for a programme as a whole, the proposed ten key indicators are applicable for all organisation types and models but are not always relevant for all products. This will be discussed in more detail for each indicator as well as in Chapter 3, which focuses on the different interpretation issues depending on different product types.

The ten key indicators focus on financial viability but their social performance dimension becomes apparent when viability is not perceived as the main end, but as one of the requirements towards providing efficient microinsurance products to the poor.

**The ten key indicators are:**

1. Net income ratio
2. Incurred expense ratio
3. Incurred claims ratio
4. Renewal ratio
5. Promptness of claims settlement
6. Claims rejection ratio
7. Growth ratio
8. Coverage ratio
9. Solvency ratio
10. Liquidity ratio

## Indicator 1: Net income ratio

### Definition

The net income ratio indicator is defined as the net income for a period divided by earned premium in the same period. This can be for a fiscal year or any other accounting period.

### How to calculate it

The formula is as follows:

$$\text{Net Income Ratio} = \text{Net Income} / \text{Earned Premium}$$

While this formula appears as a simple ratio, its components require further clarification:

- a) **Net income** during the applicable period (prior to non-permanent subsidies) *equals earned premium* in the period *plus investment income* in the period *plus other income* in the period *minus incurred claims* in the period *minus incurred expenses* in the period.
- b) **Earned premium**<sup>10</sup> *equals premium income* in the period (not cash premiums) *minus change in Unearned Premium Reserve* (UPR is explained below).
- c) **Incurred claims** *equals benefits paid during the period plus the change in reserves set aside for benefits to be paid after the period*. The general term “reserves” is used here to indicate an amount or accounting provision set aside for future benefits payable; this is a common term used in the insurance industry. These reserve changes can be portioned into the following categories:
  - i) Change in benefits payable and for which claims have already been reported to the microinsurance programme, however at the end of the period these claims were still being processed;
  - ii) Estimated change in benefits payable resulting from incurred covered events or because of policy maturities, however as of the end of the period there had not yet been any notice of these claims received by the microinsurance programme; and
  - iii) Estimated change in reserves for accrued benefits of any kind which were not yet payable or due as of the end of the period.

The commonly used terminology and accounting formula that sums this up is **incurred claims equals cash claims** in the period *plus change in Claims In Course of Settlement (CICS) plus change in Incurred But Not Reported Reserve (IBNR) plus change in Accrued Liability Reserve (ALR)*. Change in a particular reserve means the reserve level at the end of the period less the reserve level at the end of the previous period.

- d) Non-permanent subsidies are temporary in that they are scheduled or expected to end within the next few accounting periods.
- e) Other income is all other income including membership fees. Microinsurers may prefer to have other income itemized in some detail on their statements.

For organisations engaged in multiple activities, Principle 1 on the separation of data emphasizes the importance of isolating the income and expenses generated from insurance-related activities for the purposes of evaluating this indicator and for accurate and transparent reporting. As well, net income ratio should be calculated for each product which requires preparation of a multi-column Income Statement with a column for each product; this in turn requires that expenses are realistically apportioned to each product.

<sup>10</sup> Note that a change can be positive or negative. Examples: 1) If the Premium Income is 1,000 and the Change in Unearned Premium Reserve is 100 then the Earned Premium is 900 (1,000 - 100 = 900). 2) If the Premium Income is 1,000 and the Change in Unearned Premium Reserve is -50, then the Earned Premium is 1,050 (1,000 - (-50) = 1,050).

The net income ratio can and should also be derived for programmes partnering with insurance companies (i.e. a **partner-agent** setup). If the insurance company is prompted to provide a statement with its company expense charges and claims charges for the business conducted with the microinsurer within the accounting period, the microinsurer can then add its own expenses to derive the overall net income. For cases where the microinsurer partially covers some of the risk (for example, pays supplementary benefits or pays the insurer's excluded claims), claims and reserves should be calculated for the microinsurer's portion of retained risk and then combined with the insurer's to get an overall net income ratio for the programme.

The goal is to produce a complete and realistic picture of the overall net income ratio (and other performance indicators). **The reason that it should be prepared in a combined fashion even for a multiple partner programme is to assess performance from the client perspective (more below). For the same reason, the net income ratio should be calculated before reinsurance is considered.**

Investment income should be calculated on an accrual basis with only earned interest recognized in the accounting period. For example, if a certificate of deposit is purchased for a two-year period, then only the portion of the investment returns earned in the accounting period should be used irrespective of the cash from interest received during the period.

Many existing microinsurers do not calculate all incurred expenses such as depreciation of business equipment used by the programme, or they ignore the cost of operating staff working part-time on microinsurance. Measuring all of these expenses is important in order to evaluate the true financial performance of the programme.

UPR is often miscalculated- it is literally the portion of the premium that has not yet been earned at the end of the period. Accrual accounting requires that premium be earned in a manner that represents the incurred expenses and the risk pattern of covered event throughout the coverage term. In the simplest of examples, if the premium is 1200 per year for level coverage with level expenses and is effective on November 1, then on December 31 of the same calendar year the UPR would be estimated as 1000 (i.e.  $10 \text{ months} / 12 \text{ months} \times 1200 = 1000$ ) since there are ten months remaining in the coverage term. In practice, gross premium is split into its main components and each component is earned in a manner analogous to the microinsurer's actual experience. For example, for products with non-level coverage the risk portion of the premium is earned in the same pattern as the coverage<sup>11</sup>, while expenses and commissions are earned as incurred (or as required by the regulator).

IBNR and CICS are calculated based on data collected. CICS is simply the sum of the outstanding claims being processed as of the accounting date. IBNR is a reserve providing for the claims that have been incurred but have not been reported yet to the insurer as of the end of the accounting period. Since the claims are not known, it must be estimated. There are many different ways to do this, such as by studying the historical lags in how claims are reported, that is, the difference between the reported date and the incurred date. Observing the historical patterns of these lags and applying these to the current block of business is a common approach to deriving IBNR- however none of this is possible without using the microinsurer's database.

Accrued liability reserves (ALR) are as many and varied as there are microinsurance products. An actuary is needed to set up the calculation for the microinsurer; however, for products with term over a year the actuary should calculate it directly. Common products with ALR requirements are those with savings elements such as pensions and endowment products.

### *Significance and interpretation*

This net income ratio shows how profitable the microinsurance programme is: "One of the most important indicators is the microinsurer's net financial result or net income since this reflects a summary of all activities in the period reviewed. To measure net income, an accurate income statement on an accrual

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<sup>11</sup> A common example of such a product is decreasing credit life since the benefit is only the outstanding balance of the loan at the time of death.

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accounting basis has to be produced, which exhaustively reflects all costs of administering the scheme, depreciation of equipment, reserve changes, and so on.<sup>12</sup>

This is the most important “key” indicator that summarizes the entire results of the microinsurance operations. As with any key indicator, the microinsurer should analyze the results further or develop sub-indicators to better understand the source of the net income.

As a rule of thumb, there should be a positive net income ratio in the range of zero to ten percent. Values consistently above this range indicate poor value for clients and may result in loss of business or the entry of other competitors. Persistent negative values may indicate that the programme requires some changes to achieve viability. The source of the loss must be identified and addressed; it could be, for example, due to higher-than-anticipated expenses or higher-than-anticipated claims. Each reason will require a different management response. It must also be understood that most microinsurance programmes will experience losses in the initial years until a critical mass of insured has been reached.

It is important to compare the indicator over time as the trend should be towards positive results. If the trend is negative then there are likely some problems that need to be addressed. The key objective of programme management is to better understand the source of the net income.

Even if the net income goals are achieved, good management practice suggests deeper investigation to identify the deviations and patterns in investment earnings, expense levels, claims, and so on. Each of these segments can and should be studied in isolation to identify the issues that require management action.

For long term products with large savings components this indicator will be generally higher since the required premiums are lower. In comparing schemes, it is important to keep this in mind. For benchmarking purposes, it is necessary to group such products into similar categories. For more on this, see Chapter 2 and 3.

#### *Social interpretation*

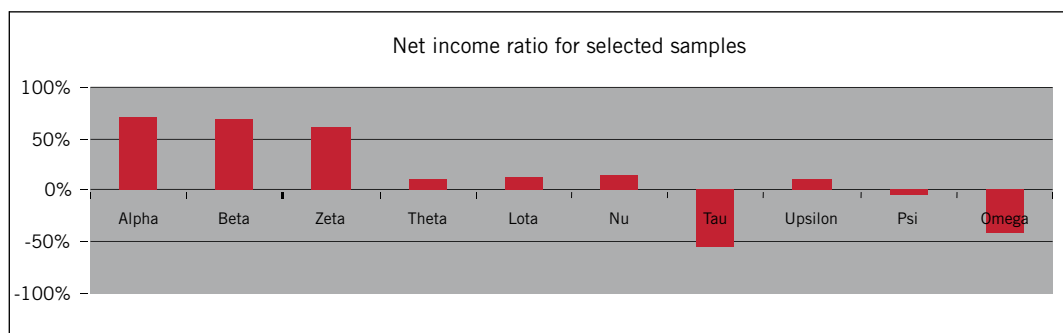
In case of non-member owned schemes, a high net income ratio could be regarded as exploitative; however, it depends on how long this continues and on the particular situation. A low income could mean that the programme is not viable or is deliberately operating at a loss because it is being subsidized by commercial business (or from another source); thus having a positive social interpretation. In member-owned schemes, a high net income ratio could indicate that the pricing needs to be adjusted since there are too few benefits for the premium- in this case the profits remain and are owned by the members. It could also be a deliberate attempt to build up surplus in order to fund future expansion or claims shocks.

#### *Sample performance*

In spite of the incompleteness of the data, the net income ratio was “roughly” estimated for illustration purposes for some samples. For example, the change in unearned premium reserve was often not provided and therefore this had to be crudely estimated in order to derive net incomes.

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12 Garand and Wipf, 2006: 327.



Because of the way net incomes were estimated from the incomplete data, there are no reliable conclusions that can be made about overall industry performance in this version of the handbook.

*Some brief observations, however:*

- There was a large variation in results.
- NU and OMEGA are small mutual schemes with health as one of their products. In their early years it is not unusual to see negative results for most self-insured health programmes.
- ZETA's principal product is a long term endowment benefit. Therefore, earnings on investment income resulted in a high net income ratio due to some distortion (see chapter 2), however in this case the increase in benefit reserve was not accounted for and it would lower profits if it had been included.
- The results for PSI, which is a commercial insurer with some microinsurance business, are for the entire insurance company. It is interesting to note that the company is in a start-up mode and therefore a negative result may not be a concern as they may have expected this in the early stages of their business plan.

## Indicator 2: Incurred expense ratio

### Definition

The expense ratio indicator is defined as the incurred expenses for a period divided by earned premium in the same period. This can be for a fiscal year or any other accounting period.

### How to calculate it

$$\text{Incurred Expense Ratio} = \text{Incurred Expenses} / \text{Earned Premium}$$

- a) **Incurred expenses** (before subsidies or grants) should reflect all actual expenses incurred in the period, including amortisation of equipment, depreciation, and commissions. This may or may not be equal to cash expenses.
- b) It is important to note that many insurers add claims settlement expenses to their claims cost and do not treat it as an operating expense. For calculating this indicator, such expenses should still be included in the numerator. Similarly, investment and reinsurance expenses should also be quantified and included- but this should not be confused with the point that all the indicators should be calculated from the perspective of the client and for the programme as a whole, i.e. before reinsurance.
- c) As defined above, **earned premium<sup>13</sup> equals premium income** in the period (not cash premiums) *minus change in Unearned Premium Reserve (UPR)*.

The first element to calculate is the expenses incurred in the period under review and these should be either calculated separately for every product or allocated from overall expenses to each product. Calculations should follow the accounting principle of recognizing the portion of the expenses incurred in the accounting period, and it will often differ from the expenses actually paid out in the period. Typically, the items that are overlooked include amortization of equipment and/or the cost of the software development.

If there are several partners involved, each participant's expenses should be included. One such example is an NGO providing health insurance with an insurer taking the risk and a third party administrator managing the claims and accrediting service providers; in this case the NGO will incur expenses for distribution and administration (which it has to separate from expenses related to other operations), the insurer will have expenses related to assuming and managing the risk, and the third party administrator will incur expenses in managing the provider accreditation and claims payment. Each partner's expenses should be included to derive the ratio.

Many microinsurance programmes invest heavily in training, in developing systems and tools, and in consultants early on in the program. These early and exceptional development expenses should be amortized over several accounting periods since it is an investment that will benefit the programme for some time and can be viewed similarly to a prepaid expense. Regular training and refresher or upgrade training should, however, be booked as an incurred expense immediately.

### Significance and interpretation

This indicator points out how efficient the delivery of microinsurance is. Good product value can “only be achieved with a low expense ratio, which is the proportion of the premium earned in a given period consumed by incurred expenses in the same period.”<sup>14</sup> The expense ratio is the portion of premium required to cover all marketing, sales (including commissions), administrative and distribution costs of the microinsurance programme. As mentioned, claims adjustment cost is considered by some insurers as an “operating expense”, while others add it to the claim cost.

<sup>13</sup> See Footnote 10 for the net income ratio.

<sup>14</sup> Garand and Wipf, 2006: 329.

Working to maintain and constantly improve efficiency while at the same time maintaining other performance indicators such as service standards is one of the most important ingredients for long term success. If the microinsurer is to provide long term value and relevance to the insured population, it has to be able to find ways to deliver services efficiently.

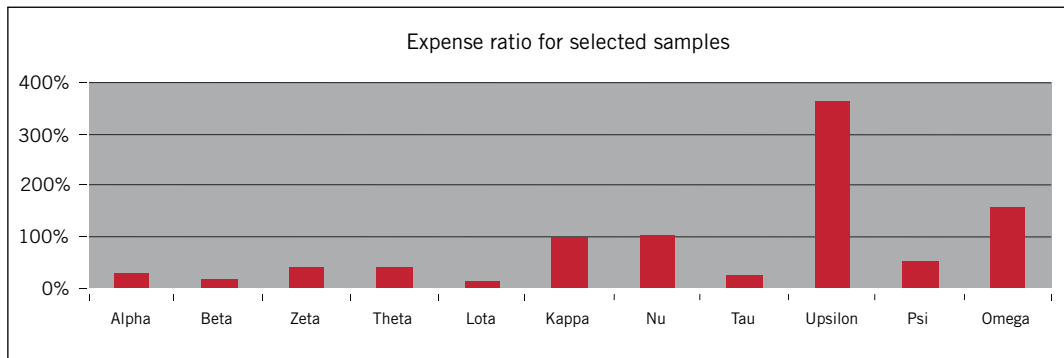
It is important to first understand the overall level of premium required to deliver the microinsurance programme- if this amount is “high,” then perhaps the distribution method is not working optimally, or the claims management function may be too burdensome, or it may be due to some other reasons. In any case, Management should constantly review if operational changes can be implemented to reduce overall expense levels.

*Social interpretation*

A high or low expense ratio is indicative of efficient delivery of services to the poor. If there is general satisfaction within the insured population, efficient delivery reduces the cost burden of the premium. On the other hand, if there is insufficient quality of service and satisfaction, then more should be invested in improving services. High expense ratio of some programmes can also be indicative of abusive Management who may be enjoying fat salaries and rich benefits at the expense of the poor.

*Sample performance*

Most samples with partner-agent setups included only their own expenses and not those of other partners involved. As such, the incurred expense ratios displayed here are for illustration and are only somewhat indicative of industry performance.



- Typically, credit life programmes like IOTA have low expense ratios compared to health insurance.
- UPSILON is in a pilot phase and has donor support; however, it will have soon have to find methods to lower cost in order to ensure long run viability. This is true for OMEGA as well.
- NU is an individual health insurer with fewer than 400 members while programme KAPPA is a self-insured group life programme with 85,000 insured in its start-up year - clearly both have a long way to go.
- The expenses for PSI (one of the commercial insurers in a start up phase) are for its entire insurance operations including microinsurance; the vast majority of its business is not microinsurance.

### Indicator 3: Incurred claims ratio

#### *Definition*

The incurred claims ratio indicator is defined as the incurred claims for the period divided by earned premium in the same period. This can be for a fiscal year or for any other accounting period.

#### *How to calculate it*

$$\text{Incurred Claims Ratio} = \text{Incurred Claims} / \text{Earned Premiums}$$

The definition of incurred claims and earned premiums was described earlier for the net income ratio. As explained, incurred claims is the sum of benefits paid for the period, an estimate of change during the period in benefits due but not yet paid, and the estimated change during the period of any accrued benefits and other liabilities but which will become due in the future.

#### *Significance and interpretation*

In essence, this ratio indicates how valuable the programme is to the insured since it measures the average proportion of premium that is returned to the insured participants in the form of benefits.

Insurance is the business of managing risk and in order to do it well the microinsurer needs a thorough understanding of its incurred claims ratio. If its value is higher than expected, further investigation is required to determine if it is due to 1) adverse selection; 2) moral hazard and fraud; 3) a statistical fluctuation; 4) inadequate understanding of the risks and the insured population; or 5) due to some other cause. A consistently low claims ratio on the other hand is also problematic since it could indicate irrelevant products or difficulty in claiming. If the low claims ratio persists the insured population could lose interest in the programme over time due to its inferior value and this could open the door to a competitor to service the same market better.

It is very important to analyse the trends of the indicator over time. For example, if the product is credit life, then an increasing influx of new younger borrowers should decrease the claims ratio and vice versa. In an effort to understand the situation better, Management should invest in capacity to segment claims data into important parameters such as age, gender, region, cause, and any other important parameter that may be impacting claims.

In general, paid claims in a given period for life, health, and asset protection products are made up of two components: 1) claims incidence or frequency, which is the number of claims divided by the number of risk exposures<sup>15</sup>; and 2) average amount paid for all claims. Multiplying the two together produces paid claims: paid claims = frequency X average claim amount. When monitoring the incurred claims ratio, both of these components must be studied carefully in order to understand what is happening because even if the incurred ratio looks normal, both of these components could be either higher or lower than expected. Conversely, if the incurred claims ratio is higher or lower than expected, its components must be analyzed to understand the source of the deviation, for this will provide insight into what is happening and where trends are likely to develop.

For health insurance, the claims ratio usually increases due to inflation of medical services or increased awareness and utilization. It is very important to identify the source of these increases. Claims databases should be designed to track all incurred costs, whether covered or not, and sufficient detail to evaluate the cost of each procedure. To put the brakes on an escalating claims ratio may require actions such as modifying the benefit structure, introducing co-payments<sup>16</sup>, introducing waiting periods, or imposing sub-limits on certain procedures; the appropriate measures can only be determined by quantifying frequency, claim amounts, and the nature of the procedures availed from data extracted from a quality database.

15 A risk exposure is one unit of risk- for microinsurance products it usually means one person covered for one year.

16 Co-payment here refers to both deductibles and coinsurance. Coinsurance can take many forms, but usually it means that the insured will have to pay a portion of the covered procedures. For example, ten percent coinsurance means that the health insurance programme will only pay ninety percent of the covered procedures, after deductibles are satisfied, and the remaining ten percent will be left to the insured.

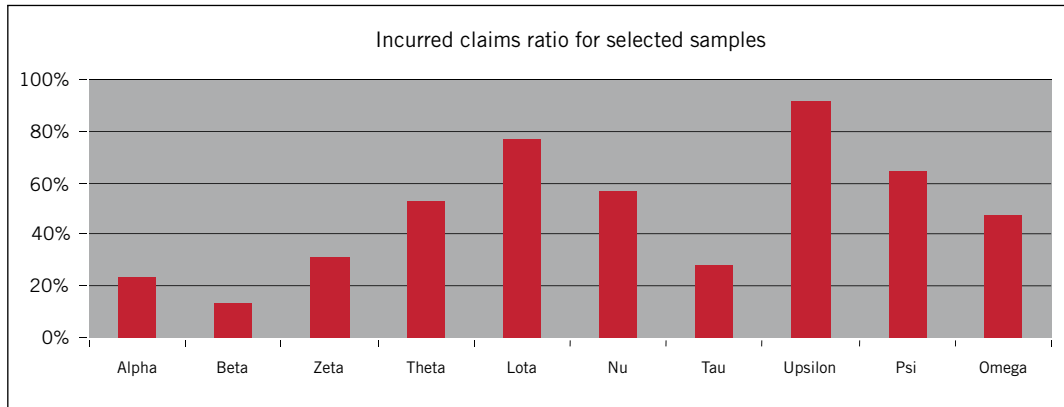
For long term savings accumulation products such as endowment, the incurred claims ratio can become distorted over time since claims and maturities are funded by interest earnings as well. This will be discussed in more detail in Chapter 2.

*Social interpretation*

Providing benefits to compensate for losses is the purpose of insurance. A higher claims ratio of a viable programme demonstrates to clients that they are getting good value for their premiums. On the other hand, a ratio that is too high may indicate the collapse of the programme, ultimately resulting in diminished social protection and value to the insured. A very low claims ratio could be viewed by clients as being exploitative of their situation; however, this depends on the type of programme and circumstances.

*Sample performance*

The problems in calculating this ratio are similar to those in the previous indicators - earned premium could not be determined. As well, due to lack of information on reserve changes, incurred claims would not be derived. Nevertheless, the estimated results are somewhat indicative of the true performance.



- If the calculation of incurred claims ratio could be taken in confidence, most programmes would not appear to have problems in this area with perhaps the exception of UPSILON.
- For the organisations with a claims ratio less than 60 percent there should be a review of the benefits offered or the premium charged if the trend persists.

#### Indicator 4: Renewal ratio

##### Definition

The renewal rate indicator is the ratio of those clients or members that renewed their coverage to those that could have renewed (i.e. were eligible to renew). This is analogous to the persistency (or retention) rate for products with continuous coverage.

##### How to calculate it

$$\text{Renewal Rate} = \text{Number of Renewals} / \text{Number of Potential Renewals}$$

The number of renewals is the number of clients or members that actually renewed their coverage. The number of potential renewals is the number of clients or members that could have renewed their coverage. This number excludes those that have become ineligible due to old age, death, or due to other reasons that resulted in ineligibility during the period in question.

The ratio has to be calculated for a pre-identified time frame, usually over a one-year period since this is the duration of coverage of most term products. The correct approach is to track a specific cohort or a randomized sample selected from the insured population at the beginning of the study period. Of course, the ratio can be computed for the entire insured population as well.

One has to understand the fine points of the definition and not to oversimplify the calculation. In the example on the next page, there are 15,000 active insured at the beginning of the year. The table shows the number of deaths, dropouts, new participants, and the number attaining ineligible age during the year. As illustrated, these numbers must be tracked for both existing clients and for new clients that bought coverage during the year. Potential renewals in this example are considered to be all clients that did not die or become ineligible due to old age during the year. The correct renewal rate in the example is 83.03%.

Example for the calculation of a renewal rate

Description	Cohort 1 (existing clients)	Cohort 2 (new clients)	TOTAL
Total insured beginning of year X+1 (equivalently, at end of year X)	15,000	0	15,000
New clients that bought coverage during the year	None, all had coverage at the beginning of the year	5,000	5,000
Number from each cohort that died during the year	45 total deaths = 40 before renewal due date + 5 died after renewal	7 new clients died	45 + 7 = 52
Number that reached maximum age during the year	500 total = 490 before renewal due date+ 10 after renewal of coverage	50 new clients	500 + 50=550
Number that did not renew = those that could not renew + those that could have renewed but did not	2,985 total = 490 (max age before renewal) + 40 (died before renewal) + 2,455 (dropped out)	N/A	2,455
Total insured at end of the year X+1	12,000	4,943	16,943
Number that renewed coverage during the year	12,015 total = 12,000 (still covered end of year) + 5 (died after renewal) + 10 (reached max age after renewal)	N/A	12,015
Number of potential renewals	14,470 = 15,000 initial - 490 (reached max age before renewal) - 40 (died before renewal)	N/A	14,470
Renewal Rate	12,015 / (15,000-490-40) = <b>0.8303</b>	NA	<b>0.8303</b>

In practice, the reasons for non-renewal are quite varied and tracking these can become complex; however, if practical, it is very important to understand and record them. Some microinsurers conduct a simple exit interview to determine the reason for non-renewal but this can only be done if there is contact with the insured at the time of exit. In any case, the reasons for non-renewal should be monitored as best as possible. If an insured exits for an unknown reason, then it could be coded as “unknown” in the database. **Calculating the renewal ratio for a selected cohort can be easily automated by developing an add-on MIS application, however this is only possible if the required information is in the database.**

To illustrate further, suppose the microinsurer in the example above coded all the reasons for non-renewal in a database, and further suppose that the database showed that 300 did not renew due to relocation or migration. Management could then calculate a modified renewal ratio as  $12,015 / (15,000 - 40 - 490 - 300) = 0.848$ .

Other reasons for termination could be included to further modify the definition of “number of potential renewals” and as more reasons are accepted the modified renewal ratio will increase since the numerator in the ratio will decrease. **Care must be taken to deduct only those reasons that are beyond the control of the insured.** Quite often the reason for non-renewal is the fault of the microinsurance agent who did not bother to contact the client when coverage expired. The main goal is to produce a meaningful renewal ratio for purposes of understanding the programme’s marketing performance.

To conclude, if possible, a set of modified renewal rates with modified definitions of “potential” renewals should be calculated to further enhance understanding. Clearly, the most conservative (lowest) renewal rate is one that considers only deaths and ineligibility since this will result in the largest denominator.

An analogous and more general measure is the **persistence ratio indicator** which “refers to the number of clients from a cohort continuing their coverage at a later date divided by the number of clients from the same cohort with coverage in Year X. It is more general than the renewal rate since it applies to both term and continuous coverage”.<sup>17</sup> The persistence ratio can be calculated analogously by tracking insured with active status instead of renewed coverage.

#### *Significance and interpretation*

This renewal rate helps determine how satisfied the insured are: “The renewal rate applies specifically to term products (products with a fixed term of coverage such as one year)... It reflects (among other things) the satisfaction of the client once the term product has been purchased.”<sup>18</sup>

The interpretation of the renewal rate is different but arguably still useful where participation is compulsory such as for a credit life insurance programme tied to a MFI’s loan services (more on this later when discussing the coverage ratio and in Chapter 2. The renewal rate may be sending several possible messages to Management. If the rate is very high (such as 90% or more) it may signify that 1) there is a good understanding of the needs of the target market; 2) the price is acceptable to the target market; 3) the service levels are reasonable; 4) the benefit is highly valued by the community; 5) and/or other important messages. The opposite is also true: “For schemes with voluntary participation, low renewal rate [...] [is] often indicative of client dissatisfaction, possibly due to poor communication, unacceptable product value, unsatisfactory claims payment, and so on.”<sup>19</sup>

Whatever the renewal rate is, Management has to interpret it carefully and determine what response is required. The renewal rate should be monitored over several time periods since the trend will provide additional insights.

17 Garand and Wipf, 2006: 324.

18 Garand and Wipf, 2006: 324.

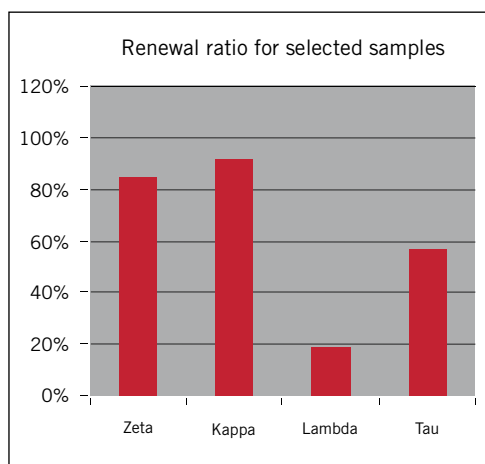
19 Garand and Wipf, 2006: 324.

### *Social interpretation*

As already discussed, low renewal ratios are often a sign that the providers of coverage have not met the social obligation of helping members to understand the role that insurance has in stabilizing their situation. There may be other reasons for a low renewal ratio such as not meeting real need of the insured, poor service at provider hospitals for health insurance due to stigmatization of clients, etc.

### Sample performance

This data to calculate this indicator was sparse and incomplete but we have a few examples.



- Some such as ZETA and KAPPA seem to have very good renewal rates (in the case of ZETA these are persistency rates).
- LAMBDA and TAU have lower renewal rates than they should have. LAMBDA explained that an NGO stopped supporting their health insurance programme, resulting in the entire clientele to drop out- this greatly brought down their ratio.
- Creditor life programmes had zero renewal rates since coverage is co-terminus with the clients' loans (see Chapter 3).

**Indicator 5: Promptness of claims settlements**

*Definition*

This promptness indicator measures the time spent by the microinsurer on settling the benefits that are due to the insured. More specifically, in the case of most microinsurance products such as life and health, it is the number of days from the date that the event was reported to the date that the benefits were received by the beneficiary. The indicator is calculated for a set of claims that has been fully processed.

*How to calculate it*

Rather than using a simple arithmetic average (which is also useful), the indicator is defined in terms of a schedule such as the one presented in the table below. The schedule more accurately describes the claims payment pattern as this type of information is lost in a simple arithmetic average.

To complete the table for a given period, one has to follow just three easy steps. First, determine the entire set of claims that was reported for the period (alternatively, the set of claims paid can be used). Second, from this set, select only the claims that have been processed and paid. Finally, apportion this set of paid claims in terms of the number of days that it took to pay each claim and according to the schedule defined in the first column of the table.

Interval	Number of claims	Percent of total claims
0 to 7 days	___	___%
8 to 30 days	___	___%
31 to 90 days	___	___%
More than 90 days	___	___%
	Total ___	100%

Notes:

- a) The table can be completed quite easily in a spreadsheet program such as Excel as long as the reported date and paid date of each claim has been recorded. It is also included in the factsheet.
- b) If not all claims are available, a sufficiently large random sample will suffice.
- c) If possible, the indicator should be studied separately for all product lines.
- d) The claims sample should be segregated by branch and by other important parameters if possible as this will highlight process inefficiencies in some areas.

Since the purpose of the indicator is to monitor promptness, it would also be prudent to monitor the time it takes for the benefit to reach the beneficiary from the date of the event. This information would shed light on the client's ability to claim.

*Significance and interpretation*

The acceptable delay depends on the context and the product; however, the shorter the delay, the better for the insured. Paying claims promptly is an important aspect of service and good value. Most microinsurance clients / members need the benefit proceeds right away in order to deal with an emergency situation which resulted from the event that triggered the claim, and if claims payment is too slow, they may be forced to sell off their productive assets or borrow from moneylenders at (often) exorbitant rates. Clearly, untimely claims payment diminishes the value of the microinsurance service and in some cases may even aggravate the insured's condition and situation since s/he may have been able to cope in an alternative manner had s/he known beforehand the length of time that it would take to receive the benefits. There are;

however, some insurers that claim to delay payments deliberately to prevent the use of benefits for funding grander funeral ceremonies instead of meaningful longer term investments.

Health microinsurance models using a cashless system provide immediate relief to the insured, and such systems would rate highest on this indicator<sup>20</sup> since all claims would qualify to be included in the first category.

There are numerous possible reasons for lengthy claims settlement and close investigation is needed to identify the causes for a particular microinsurer. Often, the beneficiary does not even know how to claim. In some cases, it is due to a cumbersome overall settlement process while in other cases it is due to excessive documentation requirements which take too much effort, expense, and time to complete. In such cases the documents often cannot be fully completed before submission and this necessitates additional interaction with the claimant.

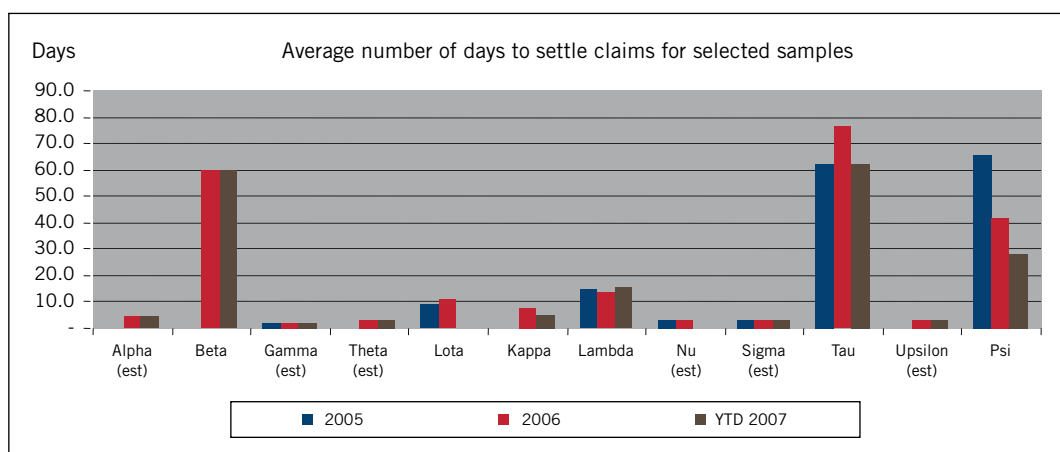
Nevertheless, the indicator does not tell the entire claims servicing story. For example, it does not capture the number of claims that are not submitted due to lack of awareness, illiteracy, or because the claimant gave up or felt intimidated by the excessive documentation requirements. In other cases, the insured families live in remote areas and the cost of travelling to the nearest servicing centre and/or the opportunity costs to follow up claims exceed the benefits of claiming. In health insurance cases there may not be a provider in the area where the insured lives which means that the incentive to use the health services and submit a claim would be greatly reduced.

#### *Social interpretation*

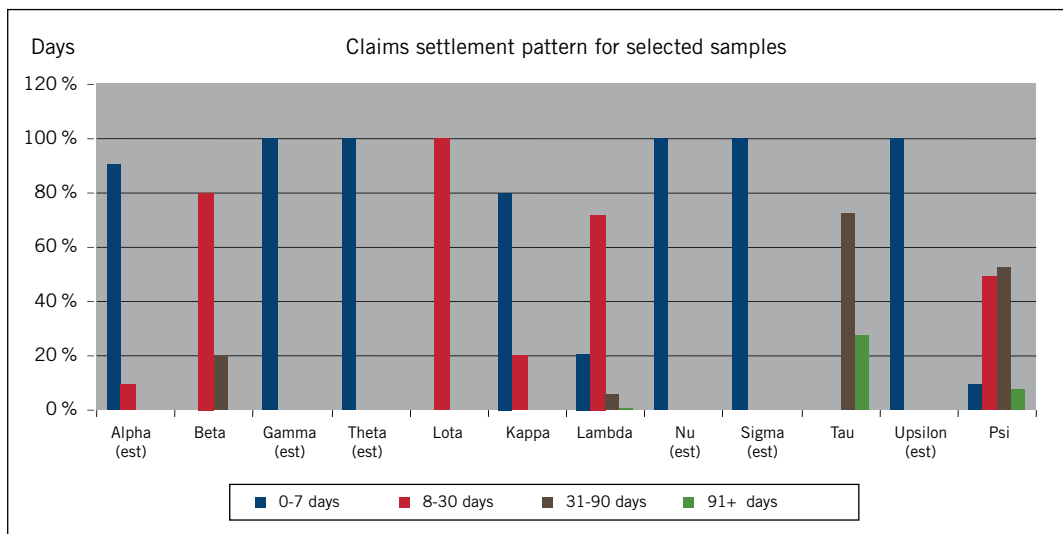
Usually, microinsurance clients require funds immediately after the occurrence of an insured event. If there are significant delays they may have to resort to money lenders, sell productive assets at a discount, or be forced to take other measures that defeat the purpose of providing the insurance product; if this happens, then the programme has failed to provide meaningful social protection.

#### *Sample performance*

Information about this indicator is not always provided or incomplete; however an estimate was still possible (where indicated in the graphs) based on best interpretation.



20 Garand and Wipf, 2006: 330.



For the most part, the performance is excellent. Some of the common reasons and experiences for poor performance given were the following:

- 1) Some microinsurers claim that their clients do not have the required financial vehicles such as bank accounts to receive benefit payments and this is the main impediment to provide rapid service. Clearly, these organisations have not yet adapted to the realities of their microinsurance market. It is impractical to expect poor people living in remote rural areas (or even in urban areas) to have a bank account or to have formal arrangements with financial institutions.
- 2) Some licensed insurers blame the regulator and the insurance laws for requiring them to collect extensive documentation such as birth certificates from the claimants. Often the required documents do not even exist. In such cases, advocacy aimed at simplifying such requirements for the poor is needed.
- 3) Some microinsurers claim that the postal system used to mail checks is very slow and inefficient, so even if they are efficient in processing claims it takes a long time for the claims cheque to reach the beneficiary. Claims payment is not complete until the cash is received by the beneficiary; therefore, these organisations should seek alternative solutions to delivering the benefits.
- 4) A challenge for many microinsurers is that the beneficiary can't be identified or found. Some innovative microinsurers mitigate this by collecting the beneficiary and insured's documentation in advance in the days following acceptance of the insurance application. This information is stored electronically or photocopied and filed in branch offices. In case of claim, documentation can be rapidly retrieved from the database.

In general, self-insured schemes such as GAMMA appear to pay claims faster than schemes partnering with commercial insurers because the adjudication and payment processes are more localized and simplified. Some organisations with an insurance partner limit themselves to a close monitoring, facilitating, and negotiating with the insurer on behalf of each claimant while others achieve rapid settlement by advancing all or part of the benefit to the claimant and then recovering the funds from the insurer. This is much easier to accomplish for SIGMA than for LAMBDA, for example, as the former's product is credit life that pays the outstanding loan balance of a deceased borrower to the MFI operations (i.e. claims payment is just an internal transaction) while LAMBDA sells an inpatient hospitalization product covering a specific list of diseases and with several internal limitations. The obvious risk, much more so for LAMBDA, is that the insurer may reject some claims leaving the organisation to recover those prepaid claims from the beneficiary or, more commonly, to absorb the cost.

## Indicator 6: Claims rejection ratio

### *Definition*

This claims rejection ratio indicator is the proportion of claims rejected to the total claims reported for a selected set of reported claims.

### *How to calculate it*

The formula is as follows:

$$\text{Claims Rejection Ratio} = \text{Number of Claims Rejected} / \text{All Claims Reported}$$

The procedure to calculate it is very straightforward. First, select all claims reported for the period in question; this will be the denominator in the ratio. Next, determine the number of claims from the set that were eventually rejected; this is the numerator.

Care must be taken to ensure that a decision to pay or not to pay has been made with respect to each claim. It would be erroneous to calculate the indicator for a claims sample that has not been fully processed since it would probably introduce a bias; this is because many claims that are rejected take longer to process as additional supporting documentation is requested or because an investigation is required.

### *Significance and interpretation*

The claims rejection indicator reflects several aspects, and perhaps the most significant of these is how well the insured understands the product. If the product is not well understood, then the claims rejection ratio is likely high for several reasons: (1) claims are submitted for events that are not covered; (2) claims are made before the waiting period has been satisfied; (3) the insured is no longer covered due to expiration of the coverage period or upon attaining maximum eligible age; (4) claims are rejected because of a pre-existing condition, and so on.

In the case of health insurance, some of the common reasons why claims are completely rejected and/or only partially paid include the following: (1) the benefit maximum has been breached; (2) a service provider has not been accredited; (3) the claim includes charges for services that were not rendered; and (4) certain expenses incurred during hospitalization were not covered. In the case of additional benefits as a result of accidental death, claims are sometimes rejected when a natural death is reported as an accidental death.

Clearly, understanding the product well is a function of consumer education as well as product design. Commercial products are often retrofitted to microinsurance programmes and this can increase the complexity and number of exclusions which confuse the poor. In some cases, unscrupulous insurers deny too many claims on technical grounds or because the insured cannot accomplish unrealistic requirements.

Whatever the causes are, a high rejection ratio usually has a negative impact on the renewal and participation rates. If a claim is rejected, there is typically a negative perception of the microinsurance program and this reaches beyond the claimant's family, especially if the claimant lives in a closely knit community or if she is a member of a Self Help Group (SHG). Whenever possible, a representative should visit the affected household and the immediate community to explain the reasons for rejecting the claim. On the other hand, if the programme is member-driven and the claim is rejected due to fraud, the rejection could improve confidence in the risk management and claims adjudication process.

*Social interpretation*

Often, a high rejection ratio is due to lack of understanding by the insured. For example, the microinsurer may not have properly explained how its health insurance programme works, resulting in clients using services that were not covered (and which otherwise would not have been used) thus increasing the burden on the poor. It is also sometimes indicative of an exploitative programme with too many exclusions resulting in excessive profits. On the other hand, while a low rejection ratio is desired, it could sometimes indicate inadequate claims management.

*Sample performance*

Given the relative sparseness of available data for claims rejection rates, it would be premature to generalize about industry's performance and overall rejection rates; in any case, such generalizations or rate comparisons should be categorized at least by product and perhaps with respect to other parameters.

In discussion with microinsurance organisations, there appears to be a determination and focus to keep this indicator low because microinsurers are acutely aware that rejecting claims has negative implications. Organisation IOTA has removed the waiting period from its credit life microinsurance program in order to reduce rejection rates, hoping that in the long run positive marketing effects will outweigh the increase in claims from adverse selection. RHO and others diligently monitor every claim and actively negotiate with insurance partners in order to reduce claims rejection.

On the other hand, there may be more organisations like health microinsurer LAMBDA that seem content with a "zero rejection rate," resulting from pre-authorizing all hospitalizations. In cases such as this, the pre-authorization denial rate should likewise be monitored since a high rate has analogous effects to rejecting incurred claims. If the pre-authorization rejection rate is high, the product should be re-evaluated and broadening of covered diseases and procedures should be considered (with pricing adjustment as necessary).

## Indicator 7: Growth ratio

### *Definition*

The growth ratio (or growth rate) indicator of a microinsurance programme could be defined in several ways. Growth in the number of insured over a selected period is selected as a key indicator, and it is defined as the increase in number of insured in the period divided by the number of insured at the beginning of the period.

### *How to calculate it*

The formula is as follows:

$$\text{Growth Ratio} = (\text{Number of Insured } n - \text{Number of Insured } n-1) / \text{Number of Insured } n-1$$

To calculate it, determine the number of active participants with valid coverage at the end of the period in question (this is Number of Insured  $n$ ), as well as the number of active participants with valid coverage at the beginning of the period (Number of Insured  $n-1$ ). Use these two numbers to evaluate the formula. Of note:

- a) To measure the growth over more than one period, a similar formula can be used. For example, the growth over the past three periods including the current period is defined as follows:

$$\text{Growth Ratio} = (\text{Number of Insured } n - \text{Number of Insured } n-3) / \text{Number of Insured } n-3$$

- b) The growth ratio as defined in the first formula is also the annual growth rate if the period in question is one year. In cases when the period length is not a year or in cases where the growth is measured over several years such as above, some additional calculations are needed in order to annualize the growth rate.
- c) The growth ratio could also be expressed in terms of increase in premium or insured amounts. But both of these ratios somewhat distort the real picture since these capture the increase in coverage per participant. Coverage per participant will usually increase over time and is affected by the inflation rate and by increased insurance awareness.

### *Significance and interpretation*

There are a few generalizations that can be made about the growth ratio indicator. For example, growth will usually be higher for newer and smaller schemes because of the lower base. Second, the growth ratio will reduce over time as the participation rate nears 100 percent.

The trend in the growth rate is usually an important indicator of the program's success over the period in question. This is especially true if participation is voluntary, in which case a positive growth ratio often indicates marketing success and product appeal. To remain viable, a microinsurance program must maintain at minimum a zero growth rate in order to replace the participants that have become ineligible, dropped out, or expired; however, depending on the circumstances and demographics a zero growth rate is usually not sufficient for long term viability. This is especially true if the scheme's products are community-rated.

The source of participants for many microinsurance programmes is a partnering institution such as an MFI requiring mandatory participation of all its eligible clients or members in the programme. Since the programme is essentially a captive of the MFI it would seem that its growth rate is entirely determined by the growth rate of the partnering organisation and the indicator reflects little about the programme. This is not always true- there is at least one documented example in Philippines where a member-owned programme attracts clients for the parent MFI, that is, participants join the MFI in order to access the microinsurance services.

*Social interpretation*

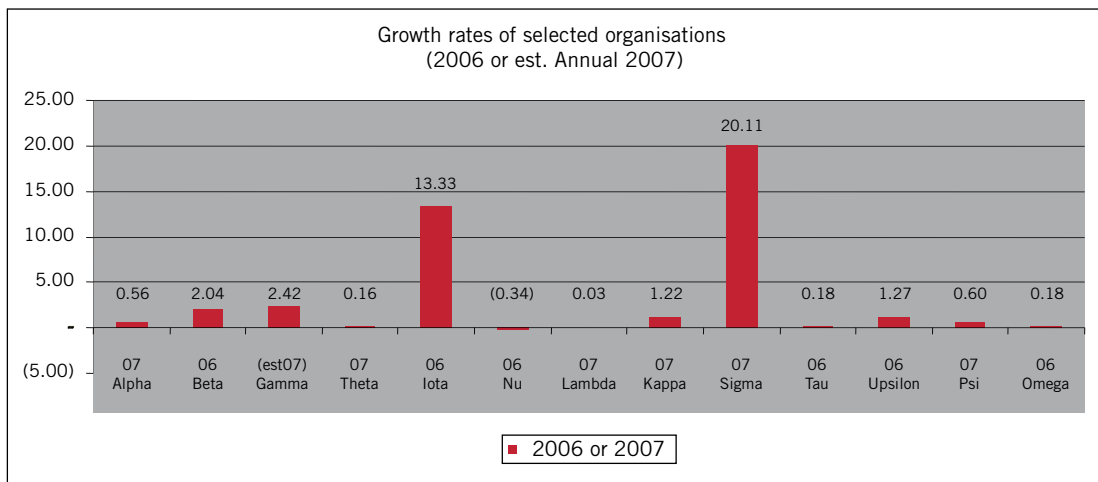
A fast growing programme will often indicate positive social relevance to its target population. The contrary is also true- declining numbers often indicate a loss of value and better alternative risk protection options.

*Sample performance*

Microinsurance is still a relatively new industry and it would be premature to draw conclusions about the growth of the industry with the available limited and diverse samples.

Growth ranged from as low as three percent experienced by organisation LAMBDA which is in its second year of promoting its individual health insurance product to an incredible 2011% experienced by the compulsory credit-life programme of SIGMA, a large MFI which is currently in a very rapid growth phase. At least some other organisations experienced growth rates over 100% and these were either very new microinsurance programmes (e.g. IOTA and OMICRON) or fuelled by the growth of an affiliated MFI (e.g. GAMMA).

The following table and graph summarizes the results:



Name	Annual growth rate	Organisational type and programme	Product type and approximate insured (2006)
ALPHA	* 2007: 56%	<ul style="list-style-type: none"> <li>• Network of rural financial institutions- credit unions, co-ops, rural banks etc.</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Individual life</li> <li>• 15,000</li> </ul>
BETA	2006 – 204%	<ul style="list-style-type: none"> <li>• Bank engaged in microfinance and microinsurance</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group life, health, accident</li> <li>• 85,000</li> </ul>
GAMMA	2006 – 56% 2007 – 242%	<ul style="list-style-type: none"> <li>• Source of members are the clients of an affiliated bank and NGO, both MFIs</li> <li>• Member-owned, self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit-life, life, limited health, pension</li> <li>• 400,000+ families, over 1m covered persons</li> </ul>
EPSILON	Not available	<ul style="list-style-type: none"> <li>• Technical services provider for MFI owned by six credit union networks</li> <li>• Technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit-life</li> <li>• 65,000</li> </ul>
ZETA	2006 – 26%	Commercial insurance company mainly targeting the middle to lower income market	<ul style="list-style-type: none"> <li>• Individual endowment life (with additional benefits)</li> <li>• 1.1m policyholders</li> </ul>
THETA	2007 - 16%	<ul style="list-style-type: none"> <li>• Mutual</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group health, life &amp; disability, livestock, crop, house</li> <li>• 3,500 insured</li> </ul>
IOTA	2006 – 1333%	<ul style="list-style-type: none"> <li>• Network of credit unions</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual credit-life</li> <li>• 36,000</li> </ul>
KAPPA	2007 - 122%	<ul style="list-style-type: none"> <li>• MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group life</li> <li>• 85,000</li> </ul>
LAMBDA	2007 – 3%	<ul style="list-style-type: none"> <li>• NGO focused on health</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (with personal accident benefit)</li> <li>• 3,655</li> </ul>
NU	No data	<ul style="list-style-type: none"> <li>• NGO</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (prevention, pharmacy and maternity)</li> <li>• 364</li> </ul>
OMICRON	2007 - 122%	<ul style="list-style-type: none"> <li>• NGO</li> <li>• Partner - agent</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• 1,767</li> </ul>
PI	No data	<ul style="list-style-type: none"> <li>• NGO focused on community development</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual Health</li> <li>• 76,500</li> </ul>
RHO	No data	<ul style="list-style-type: none"> <li>• Second level cooperative organisation</li> <li>• Partner - agent</li> </ul>	<ul style="list-style-type: none"> <li>• Life, health, accident marketed and managed individually but under several group contracts</li> <li>• 16,000 covered</li> </ul>
SIGMA	2007 – 2011%	<ul style="list-style-type: none"> <li>• For-profit MFI</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit life</li> <li>• Nearly 1m borrowers and their spouses</li> </ul>
TAU	2006 – 18%	<ul style="list-style-type: none"> <li>• NGO / MFI</li> <li>• Partner-agent</li> </ul>	<ul style="list-style-type: none"> <li>• Group health and funeral, pensions</li> <li>• 16,051</li> </ul>
UPSILON	2006 – 127%	<ul style="list-style-type: none"> <li>• NGO / MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Individual life, health, assets</li> <li>• 10,811</li> </ul>
PSI	2007 – 60%	Commercial insurance company mainly targeting higher and middle income market, with a relatively small microinsurance programme	<ul style="list-style-type: none"> <li>• Individual term life, endowment</li> <li>• 120,000</li> </ul>
OMEGA	2006 – 18%	<ul style="list-style-type: none"> <li>• Development NGO / MFI</li> <li>• Self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group life, health</li> <li>• 7,455</li> </ul>

**Indicator 8: Coverage ratio***Definition*

The coverage rate indicator is also commonly referred to as the participation rate and the penetration rate. Some practitioners and writers reserve the term coverage ratio to describe the ratio of the entire population that is covered and the latter two terms to describe the ratio of covered individuals within specific target segments of the population. In this handbook, all three terms are considered equivalent and defined as the proportion of the “target population” participating in the microinsurance programme at a given point in time.

*How to calculate it*

Throughout the discussion and in the formula, the “number of insured” is used rather than “active policies” since this is a more general term that also includes member-owned schemes, members of a group plan, and others. The formula for the indicator is:

$$\text{Coverage Ratio} = \text{Number of Insured } n / \text{Target Population } n$$

The most difficult component to define and quantify is the target market. Most microinsurers automatically track the number of participants closely as this is in itself a crucial management indicator; however, some find it more difficult to confidently estimate their target market.

*Significance and interpretation*

“Marketing and distribution effectiveness is one of the most important requirements for the long-term sustainability of a microinsurance scheme. Without successful marketing, the organisation is unlikely to reach or retain the critical mass that it needs to survive. Successful marketing in turn largely depends on the client’s satisfaction with the services and perceived value of the products...As an indicator of marketing effectiveness, the **participation rate** [coverage ratio] refers to the proportion of eligible members of a target population participating in the microinsurance programme at a given point in time.<sup>21</sup>”

In cases where the microinsurance programme is a captive of a parent organisation such as an MFI, the target population can be viewed in a number of ways. One approach is to consider the microinsurance target market as the parent organisation’s entire eligible clientele / membership and because there is usually mandatory participation in these types of setups the coverage ratio is close to one (i.e. 100 percent). If that definition were to be used the indicator is of less value in terms of assessing microinsurance marketing performance. Perhaps a better way is to consider the target market as it is defined in the parent organisation’s business plan or in the overall joint business plan; if this definition is used then the coverage ratio can be interpreted more usefully as a reflection of joint marketing performance.

In cases where participation is voluntary it is clear that the coverage ratio is a crucial indicator of the programme’s success. In the absence of a screening mechanism, a very low participation rate usually results in higher-than-expected morbidity and mortality rates due to adverse selection. Ideally, a “large” proportion of a target population voluntarily participates since this indicates popular acceptance of the risk-pooling concept. It is also likely that such a target population understands the product(s) well and knows how to access the benefits.<sup>22</sup>

*Social interpretation*

A high coverage ratio is indicative of a widely acceptable programme in which the participants are readily pooling their scarce resources to seek a measure of protection from the risks that they face.

21 Garand and Wipf, 2006: 322.

22 Garand and Wipf, 2006: 323.

### Sample performance

It is easy to assess the quality of performance in some cases but not in others. For example, PI and TAU achieve very high coverage ratios in spite of the fact that participation is voluntary. Some of the other programmes such as LAMBDA's are still very new and one should not be too hasty to assess the performance. When viewed in combination with the growth ratio it may add some additional insights with regards to where the programme is heading.

### Examples of coverage ratio

Organisation	Target market insured, coverage rate	Type of organisation and programme	Products
GAMMA	Size of target market not known, 100% of eligible borrowers in the MFIs required to join CARD MBA	<ul style="list-style-type: none"> <li>• Source of clients is its affiliated bank and NGO, both MFIs.</li> <li>• Member-owned, self-insured</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit-life, life, limited health, pension</li> <li>• 300,000 families, over 1m persons</li> </ul>
THETA	(2006 appr.) $3045 / 4165 = 0.73$	<ul style="list-style-type: none"> <li>• Mutual</li> <li>• Self insured</li> <li>• Not known</li> </ul>	<ul style="list-style-type: none"> <li>• Group health, life &amp; disability, livestock, crop, house</li> </ul>
KAPPA	(2007 projected) $190,000 / 260,000 = 0.73$	<ul style="list-style-type: none"> <li>• MFI</li> <li>• Self-insured</li> <li>• Not known</li> </ul>	<ul style="list-style-type: none"> <li>• Group life</li> <li>• 85,000</li> </ul>
LAMBDA	(2006 appr.) $3,189 / 91,648 = .0348$	<ul style="list-style-type: none"> <li>• NGO focused on health</li> <li>• Partner-agent</li> <li>• Voluntary</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (with personal accident benefit)</li> <li>• 3,655</li> </ul>
NU	(2006 appr.) $549 / 4648 = 0.0783$	<ul style="list-style-type: none"> <li>• NGO</li> <li>• Self-insured</li> <li>• Voluntary</li> </ul>	<ul style="list-style-type: none"> <li>• Individual health (prevention, pharmacy and maternity)</li> <li>• 364</li> </ul>
PI	Target market are certain tribal villages, exact population not known but near 100 percent participation for several years already	<ul style="list-style-type: none"> <li>• NGO focused on community development</li> <li>• Self-insured</li> <li>• Voluntary</li> </ul>	<ul style="list-style-type: none"> <li>• Individual Health</li> <li>• 76,500 insured</li> </ul>
SIGMA	Size of target market not known, 100% of eligible borrowers in the MFI required to buy credit life	<ul style="list-style-type: none"> <li>• For-profit MFI</li> <li>• Partner-agent</li> <li>• Compulsory</li> </ul>	<ul style="list-style-type: none"> <li>• Group credit life</li> <li>• Nearly 1m borrowers and their spouses</li> </ul>
TAU	89% of its estimated target market of 18,000 is insured	<ul style="list-style-type: none"> <li>• NGO / MFI</li> <li>• Partner-agent</li> <li>• Voluntary</li> </ul>	<ul style="list-style-type: none"> <li>• Group health and funeral, pensions</li> <li>• 16,051</li> </ul>

**Indicator 9: Solvency ratio**

## Definition

The solvency ratio indicator is defined here as the admitted assets divided by the liabilities of the microinsurance programme. This can be calculated at any point in time if the value of its components is known; however, it is preferable to calculate it at the end of the accounting period. Clearly this ratio must be at least one for the programme to be technically solvent.

## How to calculate it

$$\text{Solvency Ratio} = \text{Admitted Assets} / \text{Liabilities}$$

The insurance regulator will usually provide a list of admitted (or non-admitted) assets. The Insurance Information Institute explains the term as applicable in the United States: “[Admitted assets are] recognized and accepted by state insurance laws in determining the solvency of insurers and reinsurers. To make an assessment of an insurance company’s financial position easier, state statutory accounting rules do not permit certain assets to be included on the balance sheet. Only assets that can be easily sold in the event of liquidation or borrowed against, and receivables for which payment can be reasonably anticipated, are included in admitted assets”<sup>23</sup>.

Non-admitted assets can be categorized into two types: 1) those for which no portion is admitted such as furniture, unamortized costs for software development, loans to employees, equipment, etc.; and 2) assets for which only a portion is admitted such as real estate and similar types of investments. In the latter case, regulators generally prescribe the allowable amounts for each type of asset.

In the absence of a regulator’s definitions and guidelines, it is necessary to rely on one’s sound judgment. As the definition above prescribes, only “higher quality” assets that can be easily liquidated should be considered in determining the solvency ratio such as government securities, high grade bonds and mortgages, cash and cash equivalents, accrued interest of higher grade investments, quality real estate using either a conservative valuation of current value or the book value, whichever is lower, and so on.

Liabilities include all actuarial reserves and other accrued liabilities such as expenses payable but exclude capital and surplus (i.e. member equity). If the microinsurer cannot determine the reserves correctly then it cannot quantify the true liabilities and calculate a solvency ratio.

*Significance and interpretation*

In simplest terms, the overall solvency ratio indicates the financial strength of the insurance programme and its ability to pay its obligations now and in the future. In the commercial market, regulators address solvency issues in various ways including prescription of minimum capital and surplus requirements, investment limitations, capital adequacy tests, accounting standards, and disclosure.

All microinsurance models need to understand this ratio well. It is clear that for a self-insured programme, the microinsurer can calculate this ratio directly, but only so if it has the capacity to calculate its true liabilities (see the chapters on the key principles and also the first three indicators: net income ratio, incurred expense ratio, and incurred claims ratio). In partner-agent models, the insurer takes the risk; however, the agent should be very concerned with the solvency of the insurer especially where the products are more long-term and have a significant savings component. The agent should request audited financial statements or receive them through the regulator- in fact, an insurer that will not or cannot produce timely statements should not be chosen as a partner. Using the published financial statements, the microinsurer must ensure that the insurer’s overall solvency ratio is adequate- as a general rule, the level of the solvency

<sup>23</sup> From the website of the Insurance Information Institute [www.iii.org/media/glossary/](http://www.iii.org/media/glossary/)

ratio should be 115 percent or higher. Insurers with higher risk products and smaller insurers should aim for a much higher solvency ratio. If the number is lower than the recommended minimum, it may or may not be of concern depending on the insurer's overall business plan and on the trend the ratio has had in the current and previous years. On the other hand, having an exorbitantly high ratio in the long run is also not good as it signifies an inefficient use of capital.

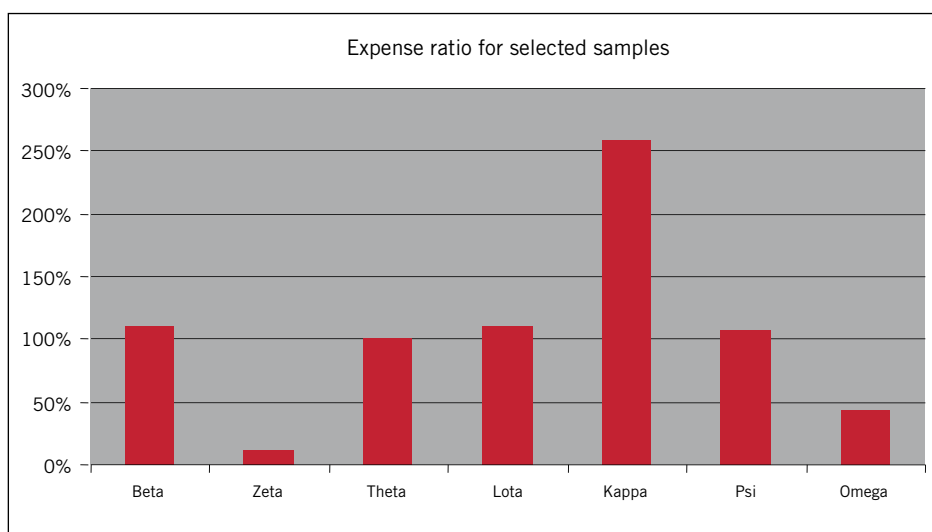
In partner-agent setups, where the microinsurer provides additional benefits by covering the insurer's excluded events or where it enhances the insurer's package, the solvency ratio should be monitored separately for both "agent-cum-insurer" and for the insurance company partner.

#### *Social interpretation*

In any insurance programme, long term solvency ensures protection for the clients. A failure of a microinsurance programme would have a negative impact on clients' trust and interesting insurance protection services even though they have a need for them.

#### *Sample performance*

When reserves are missing, most programmes end up with a positive solvency ratio.



- For ZETA, there are some obvious errors as their ratio is far too low- it must be an error since this is a commercial insurance company and the regulator monitors them annually.
- For OMEGA, the ratio is weak and it will have to be managed to reach more than 100 percent.
- PSI is also an insurer and the ratio provided also measures its regular insurance businesses which are far bigger than its microinsurance programme. It appears that they actively manage their solvency ratio.

**Indicator 10: Liquidity ratio***Definition*

The liquidity ratio indicator measures the amount of available cash to meet the “short term” obligations of the microinsurance programme.

*How to calculate it*

$$\text{Liquidity Ratio} = (\text{Available Cash or Cash Equivalents}) / \text{Short-term Payables (3 months)}$$

To evaluate the indicator, tally the available cash and short term investments that can be immediately converted to cash (e.g. government securities). Second, project expenses, claims, surrender payouts and other payables for the next three months; this is the denominator of the ratio.

The indicator has been defined here for a three month period. Microinsurers should also evaluate and monitor shorter and longer periods. The liquidity ratio formula for other periods is analogous to this one.

*Significance and interpretation*

The indicator is a simple but very important measure of liquidity and must be constantly monitored by the persons responsible for investment management. Even if a microinsurance programme has a robust solvency ratio, it could still have problems paying claims and expenses if it does not have sufficient liquidity<sup>24</sup>. Illiquidity will affect the ability to pay claims quickly and as discussed earlier in this chapter, claim processing delays will make it more difficult to promote the microinsurance programme.

The main function of investment managers is to ensure that cash from premium income, interest income, investment maturities, etc. is (re)invested in the appropriate instruments that will provide interest income and will mature in a pattern that is synchronized as close as possible with the microinsurer's future obligations while maximizing investment returns. If investments are overly concentrated in longer term assets such as real estate and long term bonds, the microinsurer could suffer liquidity problems in the short term. On the other hand, too much cash or too much money tied up in short term investments will result in excessive liquidity and forgone investment opportunities. With diminished investment returns, higher premium rates or lower benefits may be required.

*Social interpretation*

Too much liquidity increases costs or lowers benefits to clients due to lower investment returns. Insufficient liquidity will delay claims payment to client or lead to bankruptcy, adversely impacting clients at the time of need.

*Sample performance*

Generally, self-insured programmes do not systematically manage their liquidity very well nor do they base it on projected claims and expenses. Many have excessive liquidity, in part because they have problems finding suitable investments and / or due to a lack of appreciation of the implications.

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<sup>24</sup> Garand and Wipf, 2006: 328.

## 2. MEASURING PERFORMANCE: SPECIFIC INTERPRETATION ISSUES

Microinsurance programmes around the world are highly variable and differ with respect to products, modes of distribution, management capacity, and in numerous other ways. As well, the context and environment in which the programmes evolved influence a programme's development and performance. This diversity makes performance comparisons between programmes difficult and sometimes artificial; therefore a measure of caution should accompany every conclusion about relative performance. Some of these issues were already raised in the previous chapter but require further elaboration in this chapter.

### 2.1 Life insurance products

There are a lot of different life microinsurance products. Some of the major classifications of products that have been developed are term life, whole life, endowment, and credit life. All provide a payment in the event of the insured's death. Many include some additional features such as disability, accidental death coverage, funeral expense coverage or a savings element.

Life products differ in terms of duration, coverage amount and pattern, premium payment options, underwriting requirements, and in several other ways. There are two broad categories- individual and group life products. Credit life is one of the most popular group life products<sup>25</sup>; its coverage term ranges from as short as one day to several years since it is usually co-terminus with the associated loan. Credit life coverage amount is either level or limited to the remaining balance of the loan at the time of the borrower's death.

Most of the performance indicators are applicable to all types of life products; however, there are some exceptional cases that deserve to be singled out. First, the renewal ratio indicator is not really applicable to credit life programmes where coverage is compulsory for accessing credit from a lending institution. In such a case, renewal of insurance coverage is almost entirely dependent on whether or not the loan is renewed, and this in turn is determined by other factors such as service satisfaction with the lender, credit history, interest rates, and so on. It is conceivable that non-renewal of a loan was due to the negative experiences of other claimants. Second, the coverage ratio also has limited interpretative value for credit life programmes (as well as for other compulsory participation products), although there may still be some useful information to be gleaned as discussed in Chapter 1.

Third, for endowment and similar life products with a significant build-up of cash value, the indicators with earned premium in the denominator (net income ratio, incurred expense ratio, and incurred claims ratio) can become distorted over time but the manner and degree of distortion depends on the age of the programme and how it grew since its beginning. Over time, the claims ratio will begin to increase since a large proportion of the endowment will be funded by the interest income accumulated over the years. Depending on the pattern of growth in the number of new endowment policies sold over the years, the incurred claims ratio could even reach 100 percent or more. Similarly, for this same product, the incurred expense ratio will usually be much lower compared to a pure life product with similar life coverage.

Another generalization that can be made about life microinsurance products is that they are often more difficult to sell than, for example, health insurance, since benefits are "more intangible" than for health. There are many reasons for this, ranging from cultural beliefs to premature death not being on one's mind. This obviously has a dampening effect on the marketing indicators (renewal rate, coverage ratio) which may, all things being equal, tend to be lower than some other better perceived products. While this may sound like a safe generalization, it does imply that life microinsurance programmes should be segregated from other programmes when benchmarking these two indicators. Furthermore, life programmes with compulsory participation should be separated from those with voluntary participation when comparing the growth ratio, coverage ratio, and renewal rate indicators.

Typically life insurance is included in bundled products and therefore should be separated and analyzed in isolation as described in Chapter 1. For such bundled products, overall expenses will have to be appropriately allocated for each of the products in the bundle.

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25 Individual credit life is also sold in the commercial market.

For longer duration products and for those with savings elements, the clear investment policy principle is of particular importance. Endowment products, for one, are priced with an assumed rate of investment earnings over their coverage duration. If this rate is not achieved, then the product will lose money. Second, there will be deaths, surrenders, and maturities; all these types of claims must be projected and then investment reserves structured accordingly to ensure that there will be minimal risk of illiquidity. Conversely, too much liquidity may result in lower investment earnings and perhaps insufficient funds to meet the promised endowment when it becomes payable. Hence, asset-liability matching is an important practice and a crucial skill required for these types of products, as is the implementation of a clear investment policy. The liquidity indicator must also be monitored.

## 2.2 Health insurance products

Although health microinsurance may be sometimes easier to market than life insurance, it is probably the most difficult to manage. Most for-profit insurers do not offer health insurance unless it is accident related. To date, there is a tremendous diversity of health microinsurance programmes around the world; most schemes quite are young or still in experimental phase. Currently, only a few programmes are sustainable but many show great promise and innovation.

One of the main difficulties with health insurance is that services are usually provided by a third party and this makes it challenging to ensure good quality, control service costs, prevent fraud, overcharging, or excessive utilization, and so on. To overcome this, it is important to continuously accumulate clean and accurate claims and exposure data for analysis and monitor in order to rapidly detect any emerging anomalies or unfavourable trends in the experience. To get a true picture, trends in both frequency (incidence) and in the claim amounts should be monitored separately for each benefit category. To detect provider abuse and inappropriate treatment, analysis of claims at the level of each service provider is necessary. All this suggests that the principles pertaining to data gathering and constant claims monitoring together with the incurred claims ratio indicator are particularly important for health microinsurance.

The key principles and indicators are also applicable to health products. To achieve viability and wide participation requires high levels of satisfaction which can only come through quality servicing at a reasonable price and persistent consumer awareness education. The results of this will be evident for the coverage ratio, renewal rate, and growth ratio indicators.

## 2.3 Micro-pensions and related products

In mature insurance markets, pension products figure dominantly as retirement savings instruments, and these products usually consist of two phases: an accumulation phase during which savings and investment earnings jointly contribute to the growth of a personal pension fund, and a payout phase where the final accumulated pension savings are used for lump sum payout, buy a fixed term annuity or a life annuity on the retirement date. Of late, there has been an increase in micro-pension products. These products usually have a simplified payout phase limited to a lump sum payment or to a very short fixed term annuity. This is because long term and life annuities are extraordinarily risky and can only be carried by insurers that have access to a well-regulated domestic bond and secondary mortgages market, something that is rarely present in developing countries.

The indicators with earned premium as a denominator do not apply to pure pension products since there is no earned premium. If there is a life component, these types of indicators will be distorted in a similar manner to endowment products. For pure pension products the net income ratio and the expense ratio can still be calculated as a ratio of the pension contribution amounts in a manner described in Chapter 1.

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Since pensions are usually longer duration products, a persistency rate should be substituted for the renewal rate (see Chapter 1). The marketing indicators still apply and will among other things reflect the presence of a savings culture, alternative pension product offerings in the market, and the degree of trust in the institution in charge of investing the money. Of particular importance are the investment policies and other related principles as well as the solvency ratio; for the insurer, these should be monitored as a whole and for the pension product, in a segregated manner.

One of the most dangerous practices for self-insured programmes and insurers is to offer long term interest rate guarantees during the pension accumulation phase without actually owning the assets to back up the guarantees. All accumulation interest rates should be linked to the actual investment returns in the investment portfolio of reserves; any other practice by the investing institution is outright gambling since nobody can predict the direction of future interest rates. Indeed, if there were a set of indicators and an associated rating mechanism to rate the quality of management, an indicator flagging this practice should be one of the first to be considered.

## 2.4 Other insurance products

Generally, products such as asset protection are called non-life products (although in some markets health is also treated as a non-life product). Most life, health, and pension products can be safely self-insured with the required professional and technical skills, sufficient size of the risk pool, and economies of scale. Some risks, such as crop and asset protection should be managed by an insurer or reinsurer because the financial results are more variable.

Products such as crop insurance, weather insurance, and asset protection require much larger risk pools with adequate reinsurance for long term viability. These products normally cover events that can affect very large areas resulting in a rash of claims within a short period. Such events often lead to lengthier claims settlement since an adjuster may be required to visit the site of every loss; but with a good disaster claims settlement plan, rapid settlement is possible. An unprepared organization will evaluate poorly on the promptness-of-claims-settlement indicator.

For asset protection insurance, problems arise from a lack of understanding of what is covered, which events qualify for claiming benefits, and inadequate documentation of the covered asset before the loss. In case of a catastrophic event affecting a wide area such as an earthquake or flood, these awareness problems will increase the claims rejection ratio and the resulting dissatisfaction will consequently impact the marketing indicators in the following renewal period.

## 2.5 Organisational aspects

As explained earlier in this handbook, the performance of a microinsurance programme should be viewed first and foremost from the perspective of the insured member or client. Because of this, the principles and performance indicators were discussed in a generic sense, and although there is a lot of diversity in the methods of delivery, the interpretation of the indicators is similar for different models; this is also why we are convinced that it is best to measure the value of the programme from the client's perspective. However, this does not imply that all models will perform equally. In fact, each model has its advantages and disadvantages and this will likely be expressed by the performance indicators. Comparing performance between programmes is discussed in the benchmarking chapter (see Chapter 3).

There are many ways to categorize microinsurance programmes such as along the lines of who bears the risk, how the organization is set up, the distribution method, legal structure, and so on. One of the main lines of demarcation is with respect to bearing the insurance risk- that is, the primary organization is either self-insured or it cedes the risk to another risk-bearing entity such as a licensed insurance company (i.e. the so-called partner-agent setup). Many are a combination of the two in that they retain part of the risk for a particular product and cede the remaining part. For example, the agent may assume some of the insurer's excluded events or may add extra benefits to enhance the insurer's product. In this case, the agent could just as well be called the primary microinsurer and the insurer could be regarded as a reinsurer. In other cases, the sponsoring organisation may retain the entire risk for one product and then cede the entire risk for the second product.

Organisations that cede the risk to an insurer are elaborated here in order to illustrate how performance indicators should be calculated for a multiple-partner delivery model or the partner-agent model, as it is often referred to. Typically, distribution is handled by the agent (the programme sponsor), and the risk management is left to the risk-bearing partner assumed here to be a licensed insurance company. In the case of health insurance, claims processing may be handled by a third party administrator (TPA). In other situations, claims are processed by the insurer, or by the agent, or by all of the partners involved. In most programmes, the agent is an organisation with an existing client or membership base whose families require access to risk management services. This could be an employer, an association, a cooperative, an MFI, or some other type of group. Participation in the microinsurance programme could be voluntary or compulsory (automatic). Usually the agent earns a commission to cover its distribution costs. The agent may also benefit if its assets are protected from the consequences of the client's death, disability, sickness, or other risky events.

It was established earlier that in the interest of evaluating the performance from the client's perspective, all of the partners should cooperate and prepare an overall performance picture of the microinsurance programme before any reinsurance considerations. This will involve consolidation of their various databases and financial statements for the programme so that calculation of the indicators is possible. In all likelihood, the agent should lead this cooperative endeavour, assuming that quality servicing of its customer base is of great importance.

The ten key indicators are relevant to any risk bearing, i.e. partner-agent, programme. The table below briefly summarizes the typical requirements for calculating them:

<b>Indicator</b>	<b>Common data and calculation requirements</b>
Net income ratio	<ol style="list-style-type: none"> <li>1) The insurer must provide a balance sheet and income statement for the programme, i.e. not just for the entire insurance company.</li> <li>2) Earned premium should be provided by the insurer.</li> <li>3) If a TPA is involved, its costs must be included in the expenses chapter.</li> <li>4) The TPA may be in charge of the claims database; this is used by the insurer to prepare claims costs and claim reserves.</li> <li>5) The agent/sponsor must separate its microinsurance data from the data of its other activities as described in Principles 1 and 2, and prepare the microinsurance financial statements as per Principle 3.</li> </ol>
Incurred expense ratio	The expenses of all partners must be combined.
Incurred claims ratio	The paid claims and claims reserves should be based on an audited claims database. If the agent is providing extra benefits, these should be included.
Renewal rate	The renewal rate should be frequently calculated by an MIS application attached to the client and coverage history database. This database is likely to be maintained by the agent.
Promptness of claims settlement	The claims database and other sources should be used to calculate this indicator.
Claims rejection ratio	The claims database and other sources should be used to calculate this indicator.
Growth ratio	The growth rate should be frequently calculated by an MIS application attached to the client and coverage history database. This database is likely to be maintained by the agent.
Coverage ratio	The agent should define its target market to calculate this indicator (see chapter 2).
Solvency ratio	The solvency ratio should be determined for the insurer and for the programme as well. If the agent is providing some benefits, it will require some reserves which must also be considered in the programmes solvency ratio.
Liquidity ratio	The liquidity ratio should be determined for the insurer and for the agent as well if it is providing some of the benefits.

In summary, performance is impacted by many different parameters such as cultural context, type of product, organisational aspects, geographical location and dispersion, age of the programme, and so on. These will not be discussed here- but the reader and practitioner should be mindful that these are important and should keep them in mind when comparing performance of various programmes.

### 3. COMPARING APPLES AND ORANGES: THE ISSUE OF BENCHMARKING

#### 3.1 What is benchmarking?

In the previous chapters the discussion centered on describing and rationalizing key performance indicators for a microinsurance programme. Where possible, the data submitted by the available samples was used to calculate the key indicators and discussed during the workshop. For indicators such as the solvency ratio, a minimum target value was suggested. In Chapter 2, special considerations with respect to these indicators were discussed for various product lines and delivery methods.

Naturally, some readers and practitioners should ask, “What indicator values signify poor, average, good and excellent performance?” The answer depends on many factors including the type of product, operational setup, location, size, age of the programme, etc. However, even for a given programme, the performance evaluation should be described relative to the performance of peers within the industry. This is why benchmarks are needed. Since the industry is still very new, regularly updated information is important with regards to good practices and industry performance as this will guide microinsurance managers. If the indicators can be compared to established benchmarks of similar organisations and similar situations, it helps managers to think of the possibilities of doing things differently, and to question why others may be performing better. This may trigger some changes, which will ultimately lead to better performance and improved benefits to the insured client.

In the commercial insurance industry “many [...] companies use industry performance benchmarks to compare themselves to their competitors, and this helps them understand areas that require improvement. A relevant set of indicators paired with industry-accepted benchmark values (standards of performance) can be a signpost for Management, Boards and other stakeholders, helping them to ensure that the company remains solvent and that performance continues to improve.”<sup>26</sup>

Mainstream business recognizes the impact that benchmarking has on the development of industries. It is described as a tool, a process, and a highly respected practice on the website of the benchmarking service, The Benchmarking Exchange:

- “**Benchmarking is a tool** to help you improve your business processes. **Any** business process can be benchmarked.
- **Benchmarking is the process** of identifying, understanding, and adapting outstanding practices from organisations anywhere in the world to help your organisation improve its performance.
- **Benchmarking is a highly respected practice** in the business world. It is an activity that looks outward to find best practice and high performance and then measures actual business operations against those goals.”<sup>27</sup>

The objectives of Insurance Industry **Association For Benchmarking**<sup>TM</sup> in The United States shed light on how that organisation makes benchmarking work:

- “To create a cooperative environment where full understanding of the performance and enablers of “best in class” business processes can be obtained and shared at reasonable cost.
- To use the efficiency of the consortium [of participating insurers] to obtain process performance data and related best practices information from companies within and outside the insurance industry.
- To support the use of benchmarking to facilitate process improvement and the achievement of total quality.”<sup>28</sup>

<sup>26</sup> Garand and Wipf, 2006: 321.

<sup>27</sup> See [www.benchmark.com/wib.htm](http://www.benchmark.com/wib.htm)

<sup>28</sup> See [www.iiab.org](http://www.iiab.org)

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## 3.2 Can benchmarking work for microinsurance?

In a manner analogous to that of commercial business, microinsurance practitioners could set up collaborative networks for benchmarking within each country and / or at an international level. For example, microinsurance resource centres have already been set up in the Philippines and India - the use of resource centres is evident for industry collaboration and can be regarded as an added service of these resource centres. This could work especially well for those resource centres that have been established by a group of microinsurers since these groups are already used to collaborating in other areas.

In any case, a data repository can be set up where users will periodically send “snapshots” or “instances” of their databases, and as long as each database contains the required information, data migration utilities can be easily programmed to migrate and map data to the standardized format required for the consolidated data repository. The shared data should be limited or partially masked to protect the proprietary nature of some elements- for example, names of clients/members and their contact details should be deleted. Once the data has been mapped to the required format, performance indicators can be evaluated and possibly published or posted online.

## 3.3 What are the challenges?

Some microinsurance players resist the idea of benchmarking because of concerns that donors will channel their assistance towards those programmes that “perform better” as measured by the indicators. In order to “compete” for donor funding, some fear that they will be “forced” to abandon their adaptive innovations and develop in a manner that will be less than optimum for servicing the unique requirements of their clientele or membership. As described by one workshop participant, “All programmes will be pushed into a box in order to compete, just as it happened in the microfinance industry.” Furthermore, there is an apprehension that regulators would adapt the indicator values of some of the better performing programmes and set these as minimum performance benchmarks, i.e. at a level that is too difficult to attain for the majority of programmes. These are indeed plausible risks but could be overcome through effective and persistent lobbying, communication, and documentation of the industry’s diversities, needs, and accomplishments.

A second challenge is the associated cost to benchmarking. Ultimately, in the absence of donor grants, these costs will be passed on the insured but should be minimal if spread over a wide microinsurance clientele or membership. Initially, the facilities such as the computer hardware, data management software, data migration utilities, and analytical software have to be acquired and developed, thereafter the costs of periodically calculating and disseminating the results could be very “small” if participation is wide enough. To achieve significant buy-in will require some sort of cost-benefit analysis with persistent marketing, as well as visionary and strong leadership coming from within the industry.

**Box 3: Possible lessons from microfinance**

The microfinance industry has been benchmarking for more than ten years and its experiences offer useful insights to microinsurance benchmarking. For example, the MIX website operated by TheMicrobankingBulletin (MBB) describes improvements made over the years in the following excerpt:

“MFIs operate in diverse environments and differ in their scope of operations and target markets. Historically, MFIs faced difficulties in isolating adequate and comparable benchmarks. The MBB overcomes the problem of data incomparability by employing the MBB database - the most complete source of financial information and social indicators - to:

- Create appropriate and useful peer groups;
- Adjust data for comparability;
- Offer reliable and relevant benchmarks to the microfinance industry.

To make comparable benchmarks, MIX places all MFIs into Peer Groups based on a number of criteria. Peer Groups are specific enough to provide vital tools for MFI managers to compare their performance to similar institutions. Yet, MIX Peer Groups are comprised of enough institutions to ensure data privacy.”<sup>29</sup>

The website goes on to explain that peer groupings are based on three principal criteria: scale of operations, region, and target market. The resulting groupings are then further refined using secondary criteria. For example, the Latin American group is split into credit unions (since these are member-owned and principally savings-driven) and MFIs (usually for-profit and credit-driven) - the main reason for the split is that these two models have very different cost structures. The second refinement to the Latin American group is based on the country income level with the groups further subdivided into upper, middle and lower income countries since “the operating conditions in Upper Income (UI) countries, such as Argentina, Brazil and Chile, in terms of labour markets, levels of productivity, and customer characteristics, are quite distinct from the lower and middle income countries in the region. The high number of institutions offering low-end loans justifies the breakdown into multiple peer groups.”<sup>30</sup>

In a similar manner, microinsurers could initially be grouped by product type as follows: credit life, voluntary life, endowment products, accidental life and disability, asset protection, health insurance, livestock, crop and weather insurance. A second grouping would be based on the type of model: partner-agent, community based model, and so on. As the number of participating organisations increases, finer partitions could be made after careful study. As well, financial data would be adjusted for country specific inflation and would be compared in a common currency such as USD or EUR.

<sup>29</sup> See [www.mixmbb.org/en/our\\_methodology.aspx](http://www.mixmbb.org/en/our_methodology.aspx).

<sup>30</sup> Ibid.

## 4. ASSESSING SOCIAL PERFORMANCE

Microinsurance is loosely described by many as a risk management and social protection mechanism for the economically disadvantaged. According to some, however, there needs to be a clearer definition and distinction between social protection and microinsurance and, they argue, not all microinsurance programmes provide social protection. Others still define microinsurance as insurance programmes for the poor with a social protection element.

What, then, is social protection? There is a range of definitions available. According to The World Bank, “[it] is a set of interventions that assist individuals, households, and communities (i) to better manage economic risk, and (ii) to provide support to the poorest and most vulnerable.”<sup>31</sup>

The UK Department for International Development “takes a narrower definition of social protection that focuses on a sub-set of public actions that help address risk, vulnerability and chronic poverty. These comprise three sets of instruments:

- **Social insurance** refers to the pooling of contributions by individuals in state or private organisations so that, if they suffer a shock or change in circumstances, they receive financial support;
- **Social assistance** comprises non-contributory transfers that are given to those deemed vulnerable by society on the basis of their vulnerability or poverty; and,
- **The setting and enforcing of minimum standards** to protect citizens within the workplace.”<sup>32</sup>

In the chapter of the CGAP Working Group on Microinsurance compendium on social protection, it is described as follows: “Social protection is much more than a risk-management instrument for individuals. It is a comprehensive, collective tool to reduce poverty, inequality and vulnerability. It promotes equity and solidarity through redistribution. [...] it includes not only public social security schemes but also private or non-statutory schemes with similar objectives, such as mutual benefit societies and occupational pension schemes, provided that the contributions to these schemes are not wholly determined by market forces.”<sup>33</sup>

Indeed, many communities and people-based organisations around the world have organized microinsurance schemes as a means of mitigating risks that poorer families cope with on a daily basis and compensating for the shortcomings of and lack of state-sponsored social protection programmes. The ILO-STEP website GIMI even defines microinsurance as “a scheme that uses, among others, an insurance mechanism whose beneficiaries are (at least in part) people excluded from formal social protection schemes, in particular informal economy workers and their families. The scheme differs from others created to provide legal social protection to formal economy workers.”<sup>34</sup>

Microinsurance products covering assets, livestock, and outstanding loan balances, while very useful in mitigating risk of loss for the poor, do not cover the core contingencies (sickness, unemployment, old age, etc.) specified to be covered in the minimum social protection standards of the 1952 ILO Social Security Convention No. 102.<sup>35</sup> As such, these products and similar others would not be considered as social protection products in the strictest sense of the ILO definition of social protection, however many microinsurance stakeholders probably disagree. The ILO GIMI definition, along this line of argument, would not even label these products as microinsurance.

Thus social protection and microinsurance are defined in different ways by various stakeholders. For the purposes of this handbook, microinsurance is defined as insurance for the poor and is considered to have a social protection function; as such, programmes “should not only be evaluated on technical aspects (e.g. financial viability), but also on their capacity to reach social protection outcomes; the socio-economic impact of these schemes on members and non-members should be taken into consideration.”<sup>36</sup>

31 Michal Rutowski, 2007: Presentation at Iran Social Protection Seminar June 4-7, 2007. World Bank.

32 UK Department of International Development, 2006: Social Protection Briefing Note Series, Number 1.

33 Jacquier, C., Ramm, G., Marcadent, P. and V. Schmitt-Diabate, 2006: The social protection perspective on microinsurance. In Churchill, C. (ed.): Protecting the poor: A microinsurance compendium. ILO, Geneva, p. 45. The chapter is an adaptation of an ILO-GTZ joint publication and goes on to explain how social protection enhances the principles of solidarity, dignity and equality.

34 See [www.ilo.org/gimi/ShowFAQ.do?sid=24\\_a31\\_170](http://www.ilo.org/gimi/ShowFAQ.do?sid=24_a31_170)

35 Jacquier, C., Ramm, G., Marcadent, P. and V. Schmitt-Diabate, 2006: 53.

36 Jacquier, C., Ramm, G., Marcadent, P. and V. Schmitt-Diabate, 2006: 46.

Following the argument that indicators should measure the capacity to reach social protection objectives, “candidates” for key social performance indicators would include indicators in the following categories, which are, of course, not exhaustive:

- 1) Indicators that measure lowering of access barriers, be it geographic or financial. For example, some programmes that promote more localized healthcare services and cashless hospitalization should qualify as furthering social protection aims. Indicators that compare health microinsurance programmes along these lines should be developed;
- 2) Indicators that measure improvement in the quality of social protection services;
- 3) Indicators that measure outreach in terms of geography, across cultures and ethnic lines; and
- 4) Indicators that measure the degree of redistribution. For a microinsurance programme this would mean that the most disadvantaged segments of the covered population are partially or wholly subsidized by the better-off or through taxpayer subsidies. Internal redistribution can also mean that the older and higher risk individuals pay the same premium as the younger individuals for a life and health programme.

Some of the ten key indicators such as the incurred expense ratio could arguably qualify as social indicators, and the interpretation of all ten indicators can conclude on social performance.<sup>37</sup>

#### Box 4: Suggestions for social performance indicators

The July 2007 workshop participants were asked to draft up some microinsurance social performance indicators. There was no discussion beforehand with regards to the social protection definition. What emerged were several recommended indicators; however, only four were retained as “candidates” for possible future adoption as key social performance indicators:

- 1) **Social investment ratio** defined as total expenditure on information, education, and communication (IEC) divided by total expenditure of the programme. Some participants also wanted to include other expenditures such as livelihood promotion.
- 2) **Percent of insured below the poverty line** defined as number of insured below the poverty line divided by total number insured in the scheme. For this, a precise definition of poverty will be needed, and a tool to assess the poverty levels of the insured.
- 3) **Value of incurred claims in comparison with client annual income.** In practice, it would require a clear definition of what to consider in the annual income since many receive in-kind benefits and services instead of cash income.
- 4) **Cost of benefits provided in comparison to the cost of annual premium (health).** This is very similar to the incurred claims ratio.

As well, some recommendations were made, such as uniform pricing- this practice would score well as a social indicator since it promotes inclusion and an internal redistribution.

The mandate was to suggest a set of preliminary indicators. A workshop specifically focused on social indicators should be organised at some point in future, and the input from this workshop will be a start.

Regardless of the key indicators that will eventually emerge, assessment of social performance should also consider if the microinsurance programme stays true to its objectives, and that should be to provide protection to the poor or near poor. It can be argued that microinsurance is no different than industrial and mutual insurance that evolved in the early 1900’s. These pioneering insurance companies have now become some of the leading insurance companies in the world; however, along the path of becoming large, some have

<sup>37</sup> Moreover, the question arises if all indicators have to be quantitative. Some qualitative indicators with an associated points system could be defined in order to enable comparison of programmes.

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abandoned their original markets in order to serve higher income populations. This is a natural tendency as serving higher income population is easier and more profitable. As microinsurance is very challenging, especially for health and asset protection, practitioners should ensure that they always reach populations at lower income levels.

Another aspect to keep in focus is that products offered should be of value to the target population and should not take advantage of people via scare tactics. The claims ratio indicator attempts to measure that the product returns a reasonable amount in benefits and services to intended clients. Second, we also expect profits to be reasonable; microinsurance should not be there just to capitalize on replacing the local money lender's practices and profit margins. Profit should be limited to further objectives and to protect the clients. Thirdly, it would be reasonable that a microinsurer following social objectives tries to aim for efficient distribution since it has the duty to protect the poor from unsuitable and overpriced products.

In summary, social performance may also be called the second bottom line. Performance measurement should not only be focused on good management but also on the ability to help the poor to mitigate risk. To perform well in this aspect, the organisation must have a clear social objective in its mission statement and business plan.

## APPENDIX

### A. THE MICROINSURANCE FACTSHEET

The Microinsurance Factsheet is an Excel workbook with six tabs, a number of hidden tabs, and an easy -to-use tool with tables and graphs for monitoring the financial performance of microinsurance.

Following is a list of the six factsheet tabs or sheets:

**Sheet BRS00 : Identification**

**Sheet BRS01 : Balance Sheet**

**Sheet BRS02 : P&L (Profit & Loss)**

**Sheet BRS03 : Extras**

**Sheet BRS04 : Financial ratios**

**Sheet BRS06 : Graphs**

#### **For microinsurance?**

The Microinsurance Factsheet uses the terms and definitions as described in this handbook for the microinsurance industry. Still, as there is no complete standardisation across the industry, some terms and definitions may differ from the ones used at any particular level or location.

The latest version of the Microinsurance Factsheet can be found at [www.brs-vzw.be/factsheet](http://www.brs-vzw.be/factsheet)

#### **Language options?**

The Microinsurance Factsheet currently works in three languages: English, French and Spanish. At any time the user can switch from one language to another, by choosing the selected language from the drop-down box, placed at the top of all the sheets.

#### **Easy to use?**

Every item on the sheets has an item reference (e.g. A10). Most items have accompanying explanations that will appear in a pop-up window when double clicking on the item reference. Further information on the different indicators can be found back in this handbook.

Data entry in the Microinsurance Factsheet is straightforward and easy to perform by anyone who has general knowledge of accounting and microinsurance reporting. It takes about two to three hours to set up the first report in a blank format, and as less as 15 minutes to update the report. We strongly recommend first time users to start using the factsheet by reading the manual worksheet, included on the last page of each factsheet.

## B. GLOSSARY

### A

Accrual accounting	The accounting methodology that recognizes income in the period that it is earned even if such income is received in another period. Similarly, it recognizes expenses in the period incurred even if such expenses are paid in another period.
Accrued Liabilities Reserve (ALR)	A reserve that provides for the actuarial present value of accrued liabilities.
Actuarial present value	A financial estimate of a future amount considering the time value of money and the probabilities of all future events affecting it.
Actuary	A technical expert in insurance, particularly in mathematics, who applies theory of probability to the business of insurance and is responsible for the calculation of premiums, policy reserves and other valuations.
Admitted assets	Assets that are admitted by a regulator for purposes of valuing the financial strength of an insurer/microinsurer. Such assets are usually of good quality and can be easily sold in the event of liquidation and / or can be borrowed against.
Adverse selection	Adverse selection refers to the tendency of higher risk individuals to seek out more insurance coverage on average in anticipation of a greater probability of experiencing the insured event(s).
Asset class	A category of assets such as real estate, stocks, bonds, etc.
Asset-liability matching	A process of projecting future liability streams such as claims, expenses, etc. and structuring the corresponding investments, backing up these liabilities to ensure that the required returns and maturities are timed to coincide with future cash flow obligations.

### C

Capital adequacy testing	Actuarial method of projecting the future business results of an insurer under various adverse scenarios for the purpose of determining the adequacy of capital which will enable it to meet its obligations under any plausible scenario.
Claims adjustment costs	The administrative expenses related to adjudicating and organizing payment of benefits to the insured.
Claims in Course of Settlement (CICS)	Claims that have been submitted to the insurer and are still under process of adjudication.
Claims incidence	The probability of a covered person experiencing the insured event which entitles her to claim the benefit.
Coinsurance	In the most general sense, coinsurance refers to the insured retaining a portion of the insured risk. It can take many forms, but usually it means that the insured will have to pay a portion of the incurred expense. For example, a ten percent coinsurance for a health insurance programme means that it will pay only ninety percent of the covered procedures, and the remaining ten percent will be left to the insured.

Co-payment	The percentage of an incurred cost that is paid by the insured (see also coinsurance).
Commercial insurer	An insurance company engaged in the business of insurance for the purpose of making profits.
Contingency reserve	A reserve to temporarily retain profits or to absorb statistical fluctuations in claims. This is practiced by only some insurers.
Coverage term	The terms and conditions set by the insurance company for the provision of benefits to the insured.

## D

Data repository	A data warehouse.
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## E

Earned premium	The premium income in the period (not cash premiums) minus change in Unearned Premium Reserve (UPR is explained below).
Endowment	A type of life insurance that provides that the face amount will be paid if (a) death occurs during a specified number of years or (b) if, at the end of the specified number of years, when the insured is still alive.

## F

Fixed term annuity	A contract that provides a benefit amount payable for a specified period of time regardless of whether the annuitant is alive or deceased.
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## I

Incurred But Not Reported Reserve (IBNR)	IBNR is a reserve providing for the claims that have been incurred but have not yet been reported to the insurer at the end of the accounting period.
Incurred claims	The benefits paid during the period plus the change in reserves set aside for benefits to be paid after the period.
Incurred expenses	Incurred expenses (before subsidies or grants) should reflect all actual expenses incurred in the period, including amortisation of equipment, depreciation, and commissions. This may or may not be equal to cash expenses.
Investment maturity	An investment that has become due for payment to the investor.

## M

Membership fees	Some member-owned programmes charge an initial and/or a periodic fee.
Moral hazards	Moral hazard generally refers to the risk of fraudulent claims.
Mutual schemes	An insurance scheme where the insured persons are also the owners of the scheme.

## N

Net income	The earned premium in the applicable period <i>plus</i> investment income in the period <i>plus</i> other income in the period <i>minus</i> incurred claims in the period <i>minus</i> incurred expenses in the period.
Non-permanent subsidies	Subsidies that are scheduled to stop at some future period

## P

Participation rate	Other term used for coverage rate or penetration rate.
Partner-agent model	A method used by organizations to deliver insurance. The insurer maintains the risk and contracts with a partner or agent to deliver the product and or administrative services to the target market.
Penetration rate	Other term used for coverage rate or participation rate.
Persistency ratio	The number of clients from a cohort continuing their coverage at a later date divided by the number of clients from the same cohort with coverage in year X.

## R

Reserve	A fund or an accounting provision which is set aside to fund the future net liabilities of a microinsurance programme.
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## S

Service provider	An organization that provides a service which could be administrative, data processing, claims management or any other function required to deliver insurance. They may be the insurer or another organization bearing no risk.
Stand-alone risk-bearing microinsurer	A microinsurer that retains all the insured risk.
Capital and/or surplus requirements	The amount of assets required by a regulator or prudent person to transact insurance.
Surrender payouts	The amount of money which the policyholder will receive as a refund if the insured cancels the coverage.

**T**

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Term life	Life insurance under which the benefit is payable only if the insured dies during a specified period. No benefit is payable if the insured is alive at the end of that period.
Third party administrator	A party outside the original contracting parties of the insured and the insurance companies that handles an administrative function of the insurance transaction. For example, in the case of health insurance, claims processing may be handled by a third party administrator (TPA).

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**W**

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Whole life	Life insurance under which coverage remains in force during the insured's entire lifetime, provided premiums are paid as specified in the policy.
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Appui au Développement Autonome (ADA), Luxembourg, is an NGO specialised in microfinance and collaborates with microfinance institutions all over the world through financial and non-financial support and exchange.  
Website: [www.microfinance.lu](http://www.microfinance.lu)

Belgian Raiffeisen Foundation (BRS), Belgium, supports local savings, loans and insurance initiatives according to co-operative principles. BRS' support includes in depth technical assistance, training and financial support.  
Website: [www.brs-vzw.be](http://www.brs-vzw.be)

The CGAP WORKING GROUP ON MICROINSURANCE seeks to promote the development and proliferation of insurance services for low-income persons through stakeholder coordination and information sharing.  
Website: [www.microinsurancefocus.org](http://www.microinsurancefocus.org)

The opinions expressed are not necessarily those of ADA, the CGAP Working Group on Microinsurance or BRS.

Any feedback or comments can be sent to [insurance@microfinance.lu](mailto:insurance@microfinance.lu)

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