



Prudential Standard FSM 2

Valuation of Assets, Liabilities and Eligible Own Funds

Objectives and Key Requirements of this Prudential Standard

This Standard sets out the principles and requirements microinsurers should apply when valuing assets and liabilities, and determining eligible own funds, for financial soundness purposes.

This Standard sets out details of the requirements that microinsurers must adhere to when valuing assets and liabilities (including technical provisions), particularly for items where the valuation differs from those used for general financial reporting purposes.

The ultimate responsibility for ensuring that the valuation of a microinsurer's assets and liabilities meet the requirements of this Standard rests with its board of directors.

The Financial Soundness Standards for Microinsurers are designed to ensure that microinsurers can meet policyholder obligations by holding eligible own funds of sufficient quality and quantity to absorb significant unforeseen losses arising from the typical risks associated with a microinsurer's activities.

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1. Application

- 1.1. This Standard applies to all microinsurers licensed under the Insurance Act, 2017 (the Act).
- 1.2. Unless otherwise indicated, all references to “microinsurer” in this Standard can also be read as a reference to microinsurance reinsurers. Similarly, a reference to “microinsurance” obligations/policies in this Standard can be read as a reference to “microinsurance reinsurance” obligations/policies, unless otherwise specified.

2. Roles and Responsibilities

- 2.1. A microinsurer's board of directors is ultimately responsible for ensuring that the valuation of the microinsurer's assets and liabilities, and the determination of eligible own funds, comply with the principles and requirements of this Standard. The board of directors must ensure that the microinsurer has in place appropriate systems, procedures and controls to meet the requirements of this Standard on an ongoing basis.
- 2.2. A microinsurer's head of actuarial function is responsible for expressing an opinion to the board of directors regarding the accuracy of the calculations and the appropriateness of the assumptions underlying the valuation of the microinsurer's technical provisions and calculation of the microinsurer's capital requirements.¹
- 2.3. A microinsurer's auditor appointed under section 32 of the Act must audit the financial soundness of a microinsurer in accordance with its legal and regulatory obligations. The auditor must report to the board of directors and Prudential Authority any matters identified during the performance of its responsibilities that may cause the microinsurer to be not financially sound.
- 2.4. The roles and responsibilities of the board of directors and the head of actuarial function are described in more detail in the Governance and Operational Standards for Microinsurers (GOM 1).

3. Commencement and Transition Provisions

- 3.1. This Standard commences on 1 July 2018.

Version Number	Commencement Date
1	1 July 2018

4. General Valuation Principles

- 4.1. For financial soundness purposes, the key principle that microinsurers should adopt when valuing assets and liabilities (other than technical provisions) is to apply an economic, market-consistent approach to valuation, unless otherwise specified in this Standard. Consistent with an economic, market-consistent approach to valuation:
 - a) Assets should be valued at the amount for which they could be exchanged between knowledgeable and willing parties in an arm's-length transaction; and
 - b) Liabilities should be valued at the amount for which they could be transferred, or settled, between knowledgeable and willing parties in an arm's-length transaction.

¹ A microinsurer's head of actuarial function may be subject to different requirements as those that apply to the head of actuarial function of an insurer, depending on the nature, scale and complexity of the microinsurance business and the functions performed.

- 4.2. Technical provisions must be valued on the basis of a mix of a market-consistent approach and the prescribed formulas outlined in section 8 of this Standard. A microinsurer may apply to the Prudential Authority to use a different methodology or different parameter for the calculation of reserves where such an adjustment may be a better reflection of the value of technical provisions.
- 4.3. In many instances, assets and liabilities (other than technical provisions) valued in accordance with International Financial Reporting Standards (IFRS) will result in valuations that are consistent with an economic valuation approach. Consequently, microinsurers should use the value of assets and liabilities (other than technical provisions) derived under IFRS for financial soundness purposes, unless otherwise specified by the Prudential Authority or in the Financial Soundness Standards for Microinsurers.
- 4.4. Where certain assets and liabilities derived under IFRS do not result in an economic valuation, microinsurers may choose to adopt the IFRS valuation unless otherwise specified by the Prudential Authority or in the Financial Soundness Standards for Microinsurers.
- 4.5. In instances where valuation of certain assets and liabilities under IFRS can result in either a fair value or another value, the method that results in a fair value should be used.
- 4.6. In assessing whether a particular asset or liability is material for the purposes of valuation, microinsurers should adopt the definitions and guidance on materiality found in International Standard on Auditing 320 - Materiality In Planning And Performing An Audit as issued by International Federation of Accountants (IFAC) through the International Auditing and Assurance Standards Board (IAASB).
- 4.7. Section 6 of this Standard set out those assets and liabilities (other than technical provisions) where a valuation approach that differs from IFRS is required for the purposes of financial soundness regulatory assessment.

5. Hierarchy of Measurement Approaches

- 5.1. In order to derive the economic value of assets and liabilities, microinsurers should adopt the following hierarchy of valuation approaches, unless otherwise prescribed in this Standard:²
 - a) In the first instance, microinsurers should use a mark-to-market approach to measure the economic value of assets and liabilities, i.e. using readily available prices in orderly transactions that are sourced independently (quoted market prices in active markets) to value assets and liabilities.
 - b) Where a mark-to-market approach is not possible, a mark-to-model approach should be used. Mark-to-model approaches rely on benchmarking, extrapolation or other modelling of other market inputs to derive valuations. When applying this approach, microinsurers should maximise the use of relevant observable market inputs and minimise the use of unobservable market inputs.

² The valuation of technical provisions as described in section 8 of this Standard consists of a mix of a market consistent approach (either a mark-to-market or a mark-to-model approach) and prescribed formulas for some of the reserves.

6. Assets and Liabilities (other than Technical Provisions) requiring a different treatment to IFRS

- 6.1. The requirements set out in sections 5 and 6 of FSI 2.1 (Valuation of Assets and Liabilities Other than Technical Provisions) apply subject to the addition set out below.
- 6.2. Deferred taxes must not be recognised as either an asset or a liability and should be valued at nil.

7. General Principles for Valuing Technical Provisions

- 7.1. Microinsurers must establish technical provisions that correspond to the value of their insurance obligations in the event that such obligations were to be transferred immediately (i.e. at the valuation date) to another microinsurer, unless otherwise prescribed in this Standard.
- 7.2. The technical provisions must be valued on a gross basis, without deducting amounts recoverable from reinsurance contracts. Recoverables from reinsurance must be calculated separately.
- 7.3. Microinsurers must segment their insurance obligations into lines of business as shown in Attachment 1, when calculating technical provisions.

8. Valuation of Technical Provisions (Policyholder Liabilities)

- 8.1. The policyholder liabilities for a microinsurer shall consist of the total of the following reserves:
 - a) Unearned Premium Reserve (UPR);
 - b) Outstanding Claims Reserve (OCR);
 - c) Incurred But Not Reported Reserve (IBNR); and
 - d) Unexpired Risk Provision (URP).
- 8.2. The microinsurer may apply to the Prudential Authority to use a different methodology or different parameter for any or all of these reserves where such an adjustment may be a better reflection of the value of technical provisions.
- 8.3. The Prudential Authority may also direct a microinsurer to use a different methodology or parameter to better reflect the value of technical provisions.³

Unearned Premium Reserve (UPR)

- 8.4. The UPR is the amount equal to the sum of premiums corresponding to the time period remaining on a policy as at the valuation date and must be calculated at a policy level.
- 8.5. The UPR must be calculated according to the following prescribed formulae:

$$UPR = UPR_D + UPR_{RI}$$

$$UPR_D = (A - B) \times (1 - C/D)$$

³ Section 36 of the Act provides that the Prudential Authority may prescribe requirements in this regard.

$$UPR_{RI} = (A - B)/2$$

Where:

UPR_D	=	the UPR for all policies other than reinsurance policies
UPR_{RI}	=	the UPR for all inwards reinsurance policies
A	=	the sum of gross premiums for the whole policy period
B	=	the sum of policy refunds, reinsurance premiums paid, net commission and outsourcing fees payable for the whole policy period
C	=	the number of days from the commencement of the policy until the valuation date
D	=	the total number of days in the whole policy period

Outstanding Claims Reserve (OCR)

- 8.6. The OCR is the amount which the microinsurer estimates will become payable in respect of claims incurred under policies which are reported but not yet fully paid, reduced by the amount which it estimates will be received in respect of those claims under reinsurance policies.
- 8.7. The OCR must be calculated using a market consistent approach which may be based on either the judgement of the microinsurer or a statistical evaluation of past losses to project future losses. For the specific case of annuity payments, the OCR is the sum of all expected future payments.

Incurred But Not Reported Reserve (IBNR)

- 8.8. The IBNR is the amount which the microinsurer estimates will become payable in respect of claims that have been incurred but have not been reported to the microinsurer.
- 8.9. The IBNR is at least 7% (or such other percentage or method as the Prudential Authority may approve or require) of the total amount of all the premiums payable to the microinsurer under policies entered into by it in the 12 months preceding the date on which the amount is calculated, reduced by the total amount payable by the microinsurer as premiums under reinsurance policies in respect of the policies concerned.

Unexpired Risk Provision (URP)

- 8.10. Unexpired risk provision (URP), also sometimes referred to as the additional unexpired risk reserve, is the amount required to cover the excess of the reserve required to cover the expected claims and expenses over the UPR. This means it is only to be used where it is deemed that the UPR as calculated above is insufficient to cover the expected claims and expenses arising from the unexpired risk.

- 8.11. The URP must be calculated using a market consistent approach which may be based on either the judgement of the microinsurer or a statistical evaluation of past losses to project future losses. The calculation should be for the total premium reserve and then deduct the amount calculated for the UPR.

9. Reinsurance (Recoverables)

- 9.1. The requirements set out in section 12 of FSI 2.2 (Valuation of Technical Provisions) apply subject to the exceptions and adjustment set out below.
- 9.2. The requirements set out in the following sections of FSI 2.2 do not apply:
- a) Section 12.4; and
 - b) Sections 12.11 and 12.12.

- 9.3. Microinsurers must only use reinsurance contracts as risk mitigation instruments.

- 9.4. The requirements of section 12.5 of FSI 2.2 have been adjusted and are replaced by the following requirements:

Recoverables from reinsurance arrangements that are not eligible as risk mitigation instruments must be excluded from the valuation of technical provisions. Microinsurers may only use reinsurance arrangements as a risk mitigation instrument.

- 9.5. The requirements of section 12.6 of FSI 2.2 have been adjusted and are replaced by the following requirements:

In valuing amounts recoverable from eligible reinsurance contracts, microinsurers should take account of potential differences in the period between reinsurance contracts and the underlying policies, and allow for possible changes to reinsurance contract terms in valuing the best estimate of recoverables.

- 9.6. The requirements of section 12.7 of FSI 2.2 have been adjusted and are replaced by the following requirements:

Only payments in relation to compensation of insurance events and unsettled insurance claims should be included when valuing the amounts recoverable from eligible reinsurance contracts. Compensation for past and future policyholder claims must only be taken into account to the extent that the compensation can be verified in a deliberate, reliable and objective manner.

- 9.7. The requirements of section 12.9 of FSI 2.2 have been adjusted and are replaced by the following requirements:

If payments to the microinsurer from reinsurers do not directly depend on the claims against the cedant,⁴ the amounts recoverable for future claims should only be taken into account to the extent it is possible for the structural

⁴ Instances where this may arise include arrangements where payments are made according to certain external indicators, such as an earthquake index or general population mortality.

mismatch between claims and amounts recoverable to be measured in a prudent, reliable and objective manner.

10. Determination of Eligible Own Funds

- 10.1. For the purposes of meeting financial soundness requirements for microinsurers, eligible own funds are equal to basic own funds.
- 10.2. For microinsurers, basic own funds consist of the excess of assets over liabilities, less any adjustments for disallowed assets. Thus, the determination of eligible own funds is largely derived from the valuation of assets and liabilities as calculated in accordance with the principles and methodology set out in this Standard.
- 10.3. Disallowed assets are those assets of the microinsurer that are in excess of the maximum permissible amount as prescribed in the microinsurance asset spreading requirements.
- 10.4. Additional requirements may be applied to determine a microinsurer's eligible own funds for microinsurers who choose to apply to the Prudential Authority to invest their excess assets in other asset classes besides cash, cash equivalents or investment funds restricted to money market funds. The additional requirements will be at the discretion of the Prudential Authority and on a case-by-case basis.

Asset spreading requirements

- 10.5. A microinsurer may only invest in cash, cash equivalents⁵ and investment funds restricted to money market funds, unless they have applied to the Prudential Authority and received permission to invest some of its assets in other instruments.
- 10.6. For investments in cash, cash equivalents and investment funds restricted to money market funds, only 25% of the total liability (net of reinsurance) and capital requirements invested in any one financial institution will be recognised as assets for the purpose of determining eligible own funds. A microinsurer may apply to the Prudential Authority for a change in the maximum limit, which will be assessed on a case-by-case basis.

⁵ Cash and cash equivalents are defined as per the CIC table.

Attachment 1: Prescribed Lines of Business

This Attachment sets out the lines and sub-lines of business that must be used for the purposes of segmenting insurance obligations when calculating technical provisions.

A. Life insurance and life reinsurance

- Life insurance and reinsurance obligations must be segmented into the following lines and sub-lines of business.⁶

	Level 1		Level 2		Level 3
1.	Risk	a.	Individual		Individual
		b.	Grouped Individual ⁷		Grouped Individual
		d.	Credit Life – Individual		Credit Life – Individual
		e.	Credit Life – Grouped Individual		Credit Life – Grouped Individual
		g.	Funeral – Individual		Funeral – Individual
		h.	Funeral – Grouped Individual		Funeral – Grouped Individual
5.	Reinsurance	a.	Proportional Treaty	i.	Life and death – lump sum
				ii.	Health – lump sum
				iii.	Disability – lump sum
				iv.	Combined life and death, health and disability – lump sum
				v.	Health – recurring payment
				vi.	Disability – recurring payment
				xii.	Other
				c.	Facultative
		ii.	Health – lump sum		
		iii.	Disability – lump sum		
		iv.	Combined life and death, health and disability – lump sum		
		v.	Health – recurring payment		
		vi.	Disability – recurring payment		
		xii.	Other		

⁶ In the table below, the lines of business are represented as “Level 1”, while the sub-lines of business are represented as “Level 2” and “Level 3”.

⁷ “Grouped Individual” policies refer to an individual policy which is underwritten on a group basis.

B. Non-life insurance and non-life reinsurance

1. Non-life insurance and reinsurance obligations must be segmented into the following lines and sub-lines of business.⁸

	Level 1		Level 2		Level 3
1.	Motor	a.	Personal lines		
2.	Property	a.	Personal lines		
3.	Agriculture	a.	Personal lines	i.	Crop
				ii.	Equipment
				iii.	Other
9.	Legal Expense	a.	Personal lines		
11.	Consumer Credit	a.	Personal lines		
14.	Accident And Health	a.	Personal lines	i.	Individual
16.	Miscellaneous	a.	Personal lines	ii.	Pet insurance
				iii.	Other
18.	Reinsurance ⁹	a.	Proportional Treaty		
		d.	Proportional Facultative		

⁸ In the table below, the lines of business are represented as “Level 1”, while the sub-lines of business (where applicable) are represented as “Level 2” and “Level 3”.

⁹ Inwards reinsurance should be further segmented into each of the above lines and sub-lines of business based on the type of obligations being reinsured.