L-42- Valuation Basis (Life Insurance)

A chapter on Valuation basis covering the following minimum criteria should also be displayed on the web-site of the Insurers.

Data

The company maintains the Policy data in the policy administration system called Life Asia. The system captures all the information required for the purpose of the statutory valuation.

The data for the purpose of annual statutory valuation is obtained after the business closure for the financial year.

A series of validation checks is performed to ensure accuracy and completeness of the data.

Valuation Method

The policy liability for individual line of business is calculated using the actuarial software called PROPHET.

The assumptions (valuation bases) are input into the PROPHET system manually in the format as prescribed/appropriate for the system to perform the calculation.

The actuarial liabilities of the company have been calculated in accordance with the requirements of Insurance Act, 1938, Insurance Regulatory and Development Authority (Assets, Liabilities, and Solvency Margin of Insurers) Regulations, 2000 and other regulations, Actuarial Practice Standards and Guidance Notes issued by Institute of Actuaries of India and having regards to generally accepted actuarial practices.

Individual Linked Business: Reserves consist of two components, namely unit reserves and non-unit reserves. The following methods have been used to determine these reserves:

Unit Reserve:
Under linked life insurance contracts, unit reserves are calculated in respect of the units, under various funds, allocated to the policies in force at the valuation date using unit values at the valuation date.

Non Unit Reserve:
The non-unit liabilities in respect of the linked contracts are determined using a prospective gross premium method under which future net cash flows are discounted back to the date of valuation on policy-by policy basis.

In addition to the above, a separate provision is made for the following:

i) Lapsed policies: I have kept the full unit reserves in respect of lapsed policies which, based on valuation assumptions, are likely to be reinstated/revived. The reserves kept under the lapsed policies which are not likely to be revived have been calculated in a manner to ensure that the amount of such reserve is not less than the surrender value payable in respect of such policies, if any.

   For unit linked policies issued before 1 September 2010, have completed five years of policy duration. Since there is no surrender penalty for policies which are surrendered post completion of policy duration of five years there will be no FFA for these policies and the entire lapsed reserve would be held in the policyholder fund as a liability.

   For unit linked policies issued from 1 September 2010, I have kept value of discontinuance fund as discontinuance liability and an additional non-unit reserve equal to the revival rate multiplied by the discontinuance charges deducted to date for the lapsed policies which are within the revival period.

ii) Unearned mortality charges: One month's mortality charges based on mortality charges deducted in the month of June 2016 in respect of all in-force policies have been kept as unearned mortality charges reserve.

iii) Unearned morbidity charges: One month's morbidity charges based on morbidity charges deducted in the month of June 2016 in respect of in-force policies with morbidity benefit have been kept as unearned morbidity charges reserve. For Health product, the charges are deducted annually in advance. In this case the unearned morbidity charges till the next renewal date has been kept as unearned morbidity charge reserve.

iv) Incurred but not reported (IBNR) claims: For individual Business, I have used run-off triangle approach to allow for the delay in claim intimation. For unit-linked health contract, as the delay in reporting for health related claims is comparatively less than mortality related claims, half month's morbidity charge has been kept as IBNR.

v) Extra Mortality Reserve: The lives subject to extra mortality and morbidity risk pay higher mortality charges. The unearned mortality and morbidity charges above will include these extra charges. The extra mortality reserve in respect of substandard lives is therefore implicitly allowed in unearned mortality/morbidity charge calculation.

vi) Options and Guarantees: As none of the contracts offer any financially significant options or guarantees, I have not provided any extra reserve in respect of options and guarantees.

Individual Non-Linked Business:
As on valuation date the company had term assurance, mediclaim policy, fund based variable endowment, individual participating business, non-participating cash back plan and immediate annuity product under non-linked category. The reserve is determined using gross premium method. The reserve under this method is the excess of discounted value of future benefit outgo and expenses including commission over discounted value of future office premium. For regular premium policies this method may give rise to negative reserve which is zeroised and the reserve is topped up by the unearned premium for the policy year. For single premium polices where policy is eligible for surrender value the mathematical reserve is the higher of gross premium reserve calculated above and the surrender value. Surrender values are not offered on regular premium term contracts.

For lapsed policies, reserve is kept by applying a revival rate on the reserve calculated assuming that the lapsed policies are inforce and netting off for the premiums due.

An IBNR has been calculated using the run-off triangle approach for the total individual business and apportioned by proportion of claims outgo to this class.

An extra premium reserve is the extra reserve over the standard mortality reserve. The reserve is recalculated by building in the extra mortality rate into the reserve calculation. The difference between the recalculated reserve and the standard mortality reserve if positive is maintained as the extra premium reserve.

Group Linked Business
Reserves consist of two components, namely unit reserves and non-unit reserves. The following methods have been used to determine these reserves:

Unit Reserve:
The reserve held under the group unit-linked plan is unit reserve which is calculated in respect of the units, under various funds, allocated to the policies in force at the valuation date using unit values at the valuation date.

Non-Unit Reserve:
A UPR reserve has been kept in respect of the death benefit. The future management charges are higher than the future expenses allowing for MAD. As no negative cash flow occurs in the future under valuation assumptions, I have kept non-unit reserve as zero.

Group Non-Linked Business
The method adopted for group yearly renewable term is unearned premium reserve (UPR) method. For group credit life, Gross Premium method was adopted. The reserves are set as the higher of the GPV reserve & minimum surrender value at member level.

For Group Credit Life business, an extra premium reserve is the extra reserve over the standard mortality reserve. The reserve is recalculated by building in the extra mortality rate into the reserve calculation. The difference between the recalculated reserve and the standard mortality reserve, if positive, is maintained as the extra premium reserve. This reserve is not required to be calculated for the Group Term and Group Fund business as the UPR method is used for calculation of mortality reserve where the premium includes the extra premium.

For group yearly renewable term and group credit life, run-off triangle approach has been used to calculate IBNR at the valuation date and apportioned between the two products by proportion of claims outgo.

For Group Retirement Benefit Plan/Corporate Benefit Plan/Group Superannuation Plan/New Corporate Benefit Plan, the accumulated fund value is kept as reserve. A UPR reserve has kept in respect of death benefit wherever applicable.

<u>Global Reserve</u>

In addition, a global reserve has been kept for the following.

a) *Free Look Reserves*: The estimated refund of charges on the policies expected to be subject to free-look cancellation is kept as free-look reserve. This is a global reserve.

b) *Closure to New Business Reserve*: This is additional reserve held to service the existing policies in the event that the company would stop writing new business one year from date of valuation. The maintenance expense over-run during the valuation year has been kept as the closure to new business reserve.

c) *Contingency Reserve:* We have kept an extra contingency reserve to allow for any unexpected reserve requirements that may arise. The contingency reserve for unit linked business is kept under non linked reserve of unit linked business. However this reserve is intended to meet any unexpected reserve requirements that may arise under any line of business including unit linked business.

d) Maintenance Expense Overrun reserve: The company has kept a maintenance expense overrun reserve which is expense overrun expected to arise in the future based on the projection of the latest approved business plan and the existing position as at March 2016 . It has been observed that there is no maintenance expense overrun beyond FY2016-17 and so the provision is based on the projected maintenance expense overrun for the FY2016-17. The company will re-evaluate the requirement for the maintenance expenses overrun at the end of the next financial year i.e. FY2016-17

Valuation Assumptions

Individual Unit- Linked Products

Interest Rate

The interest rate assumption is derived based on the current redemption yield and in accordance with the IRDA Regulations 2000 and Guidance Notes issued by Institute of Actuaries of India.

The interest rate used for the purpose of non-unit unit reserve calculation 4.74% p.a. for next five years and 3.94% p.a. thereafter.

Fund Growth Rate

For the purpose of the projection an assumption is made for future fund growth for various funds. This is arrived based on the current yield on various instruments like G-sec, Money Market etc and the proportion of these instruments in each of the fund the company offer for its unit-linked policy-holder.

Fund Name	Next 5 Years	Beyond 5 years
Equity	8.68%	7.88%
Debt	6.40%	5.61%
Balanced	7.84%	7.04%
Liquid	4.69%	3.90%
Value Fund	8.21%	7.42%
Index Fund	8.91%	8.12%
Dynamic Fund	8.68%	7.88%

Inflation Rate

The inflation rate used of the purpose of valuation is 4.37%.

Mortality

The mortality assumption used is 99% of IALM 2006-08 Ultimate..

Morbidity

This is applicable for inbuilt riders attached to IndiaFirst Education Plan, IndiaFirst Young India Plan and IndiaFirst Happy India Plan. Morbidity rate used is 0.2178 per 1000 SA.

Expense

The renewal expense per policy for the purpose of valuation is Rs.401 for the single premium and Rs.643 for regular premium for the products IndiaFirst Savings Plan, IndiaFirst Education Plan and IndiaFirst Future Plan.

The renewal expense per policy assumed is 1.92% of the annual premium for regular premium and 0.6% of single premium for single premium mode for the products IndiaFirst Smart Save Plan, IndiaFirst Young India Plan, IndiaFirst Money Back Health Insurance Plan, IndiaFirst High Life Plan, IndiaFirst Money Balance Plan and IndiaFirst Happy India Plan.

The expense is assumed to increase at inflation rate mentioned above.

The fund management expense is 0.18% of the unit-reserve.

Individual Non- Linked Products

Interest Rate

The interest rate assumed for with-profit products is 5.66% for next five years and 4.87% thereafter. The interest rate assumed for term products is 5.58% for next five years and 4.78% thereafter. The interest rate assumed for health product is 4.48% for next five years and 3.69% thereafter

Mortality

The mortality assumption used is

Product	as % of IALM 2006-08 ultimate
IndiaFirst Life Plan	66%
IndiaFirst Anytime Plan	61%
IndiaFirst Simple Benefit Plan	121%
IndiaFirst Simple Benefit Plan - Revised	121%
IndiaFirst Secure Save Plan	110%
IndiaFirst Maha Jeevan Plan-v1	121%
IndiaFirst Maha Jeevan Plan-v2	121%
IndiaFirst Maha Jeevan Plan-v3	110%
IndiaFirst Mediclaim Plan	99%
IndiaFirst CSC Shublabh Plan	124%
IndiaFirst Cash Back Plan	99%

Product	as % of IALM 2006-08 ultimate		
	Sum Assured	Smoker	Non-Smoker
IndiaFirst Life Plan - Revised and IndiaFirst Anytime Plan - Revised	Less than 50 lakhs	71.5%	71.5%
	50 lakhs and above	55%	33%

Expense

The renewal expense of IndiaFirst Anytime Plan and IndiaFirst Life Plan is Rs.193 p.a. for regular premium and Rs.96 p.a. for single premium. Claim expense of 1.2% of death benefit subject to maximum of Rs.10,000

The renewal expense of IndiaFirst Anytime Plan - Revised is 3.60% p.a. for regular premium and Rs.96 p.a. for single premium. For IndiaFirst Life Plan - Revised it is 6.00% p.a. for regular premium and Rs.96 p.a. for single premium.

The renewal expense of IndiaFirst Secure Save Plan, IndiaFirst Maha Jeevan Plan, IndiaFirst Cash Back Plan and IndiaFirst Simple Benefit Plan is 2.4% of annual premium. For revised version of IndiaFirst Maha Jeevan Plan and IndiaFirst Simple Benefit Plan it is 6.00% of annual premium.

The renewal expense for IndiaFirst Mediclaim Plan is 8.40% of annual premium.

One Year Group Term

The reserve with respect to this product is UPR and it is based on the received premium less commission.

Group Credit Life Plan

Interest Rate

The interest rate used is 5.58% for next five years and 4.78% thereafter.

Mortality

The mortality assumption used is

Type of loan	as % of IALM 2006-08 ultimate
Group Credit Life – Housing Loan	70%
Group Credit Life – Education	74%
Group Credit Life – Vehicle	86%
Group Credit Life – Personal	99%

Credit Life Plan – Revised - Housing Loan	60% - 78%
Credit Life Plan – Revised - Education	60% - 78%
Credit Life Plan – Revised - Vehicle	72% - 93.6%
Credit Life Plan – Revised - Personal	72% - 93.6%

Expense

For Group Credit life product version 1 the renewal expense is Rs.80 increasing with inflation and for revised version it is 0.6% of premium. Claim expense of 1.2% of death benefit subject to maximum of Rs.10,000