

Embedded Value

BACKGROUND

China Life prepares financial statements to public investors in accordance with Hong Kong GAAP. An alternative measure of the value and profitability of a life insurance company can be provided by the embedded value method. Embedded value is an actuarially determined estimate of the economic value of the life insurance business of an insurance company based on a particular set of assumptions about future experience, excluding the economic value of future new business. In addition, the value of one year's sales represents an actuarially determined estimate of the economic value arising from new life insurance business issued in one year.

China Life believes that reporting the Company's embedded value and value of one year's sales provides useful information to investors in two respects. First, the value of the Company's in-force business represents the total amount of distributable earnings, in present value terms, that can be expected to emerge over time, in accordance with the assumptions used. Second, the value of one year's sales provides an indication of the value being created for investors by new business activity and hence the potential of the business. However, the information on embedded value and value of one year's sales should not be viewed as a substitute of financial measures under Hong Kong GAAP or any other accounting basis. Investors should not make investment decisions based solely on embedded value information and the value of one year's sales.

It is important to note that actuarial standards with respect to the calculation of embedded value are still evolving and that no universal standard has yet been adopted which defines the form, calculation methodology or presentation format of the embedded value of an insurance company. Hence, differences in assumptions, methodology, definition, accounting basis and disclosure level may cause inconsistency when comparing the disclosed embedded values of different companies.

Also, embedded value calculation involves substantial technical complexity and estimates can vary materially as key assumptions are changed. Therefore, special care is advised when interpreting embedded value results.

The embedded value and value of one year's sales shown in this section have not considered the financial effect of the policy management agreements, property leasing agreement, trademark license agreement and non-competition agreement China Life has entered into with China Life Insurance (Group) Company. The impact of transactions between China Life and China Life Insurance Asset Management Company has not been considered either.

DEFINITIONS OF EMBEDDED VALUE AND VALUE OF ONE YEAR'S SALES

The embedded value of a life insurer is defined as the sum of the adjusted net worth and the value of in-force business allowing for the cost of capital supporting a company's desired solvency margin.

The "adjusted net worth" is equal to the sum of:

- Net assets, defined as assets less policy reserves and other liabilities, all measured on a PRC statutory basis; and
- Net of tax adjustments for relevant differences between the market value of assets and the value determined on a PRC statutory basis, together with relevant net of tax adjustments to other liabilities.

According to the PRC accounting basis, an impairment provision is not required until the market value of the long-term investment has been consistently lower than the book value for more than two years. As the embedded value is based on market value, it is necessary to make adjustments to the value of net assets under the PRC accounting basis.

The market value of assets can fluctuate significantly between different valuation dates due to the impact of the prevailing market environment. Hence the adjusted net worth can also fluctuate significantly between different valuation dates.

The "value of in-force business" and the "value of one year's sales" are calculated as the discounted value of the projected stream of future after-tax distributable profits for existing business in force at the valuation date and for one year's sales in the 12 months preceding the valuation date respectively. Distributable profits are those profits arising after allowance for policy reserves on the required PRC statutory reserving basis and after allowance for solvency margins at the required regulatory minimum level. The allowance for cost of solvency margin takes into account the support to the statutory minimum solvency margin provided by the Staff Welfare Fund.

The value of in-force business and the value of one year's sales have been determined using a traditional discounted cash flow methodology. This methodology makes implicit allowance for the cost of investment guarantees and policyholder options, asset/liability mismatch risk, credit risk and the economic cost of capital through the use of a risk-adjusted discount rate.

ASSUMPTIONS

For the purpose of calculating the value of in-force business and the value of one year's sales, we have assumed an investment return of 3.70% in 2004, grading to 5.17% in 2013 (remaining level thereafter). Assumed investment returns are based on the company's long term strategic asset mix and expected future returns. The risk-adjusted discount rate used is 11.5%. Other assumptions are determined by considering recent operating experience of the company and expected future outlook.

Embedded Value

PREPARATION

The embedded value and the value of one year's sales were prepared by China Life with assistance from the Tillinghast business of Towers Perrin, an international firm of consulting actuaries. Tillinghast considers that the methodology adopted to determine these values is reasonable in the context of the current environment as a commonly adopted methodology for the purposes of providing an embedded value disclosure in the normal course of financial reporting. Tillinghast also considers that the assumption set adopted to determine these values, taken as a whole, is reasonable for this same disclosure purpose.

SUMMARY OF RESULTS

The embedded value as at December 31, 2004 and the value of one year's sales for the 12 months to December 31, 2004 are shown below.

Table 1

Embedded Value as at December 31, 2004 and Value of One Year's Sales in the 12 months to December 31, 2004 (RMB million)

ITEM	ITEM NUMBER	RMB MILLION
Adjusted Net Worth	A	52,909
Value of In-Force Business before Cost of Solvency Margin	B	44,998
Cost of Solvency Margin	C	(7,834)
Value of In Force Business after Cost of Solvency Margin	D = B + C	37,164
Embedded Value	E = A + D	90,073
Value of One Year's Sales before Cost of Solvency Margin	F	8,550
Cost of Solvency Margin	G	(2,046)
Value of One Year's Sales after Cost of Solvency Margin	H = F + G	6,504

SENSITIVITY TESTING

Sensitivity testing was performed using a range of alternative assumptions. In each of the sensitivity tests, only the assumption referred to was changed, with all other assumptions remaining unchanged. The results are summarised below.

Table 2

Sensitivity Results (RMB million)

	VALUE OF IN-FORCE BUSINESS AFTER COST OF SOLVENCY MARGIN	VALUE OF ONE YEAR'S SALES AFTER COST OF SOLVENCY MARGIN
Risk discount rate of 12.5%	33,370	5,661
Risk discount rate of 10.5%	41,491	7,476
10% increase in investment return	43,203	7,738
10% decrease in investment return	31,128	5,273
10% increase in expenses	36,536	5,955
10% decrease in expenses	37,792	7,053
10% increase in mortality rate for non-annuity products and 10% decrease in mortality rate for annuity products	36,820	6,387
10% decrease in mortality rate for non-annuity products and 10% increase in mortality rate for annuity products	37,509	6,568
10% increase in lapse rates	36,092	6,229
10% decrease in lapse rates	38,304	6,797
10% increase in morbidity rates	36,503	6,374
10% decrease in morbidity rates	37,829	6,635
Solvency margin at 150% of statutory minimum	32,528	5,337
10% increase in claim ratio of short term business	36,966	6,067
10% decrease in claim ratio of short term business	37,361	6,941