# **Embedded Value**

#### Introduction

In order to provide investors with an additional tool to understand our economic value and business performance results, the Group has disclosed information regarding embedded value in this section. The embedded value represents the shareholders' adjusted net asset value plus the value of the Group's in-force life insurance business adjusted for the cost of regulatory solvency margin deployed to support this business. The embedded value excludes the value of future new business sales.

The Group has received advice from and consulted with Watson Wyatt Insurance Consulting Limited in the selection of basis and the calculation of the value of in-force life business and the value of one year's new business. The Group remains wholly responsible for the results and presentation of the embedded value which comprises the adjusted net asset and the value of in force life business.

The calculation of embedded value necessarily makes a number of assumptions with respect to future experience. As a result, future experience may vary from that assumed in the calculation, and these variations may be material. The market value of the Group is measured by the value of the Group's shares on any particular day. In valuing the Group's shares, investors take into account a variety of information available to them and their own investment criteria, therefore these calculated values should not be constructed as a direct reflection of the actual market value.

# **Components of Economic Value**

| For years ended December 31, (in RMB million) | 2004     | 2003     |
|-----------------------------------------------|----------|----------|
|                                               |          | 12.524   |
| Adjusted net asset value                      | 25,161   | 13,631   |
| Value of in-force insurance business written  |          |          |
| prior to June 1999                            | (16,743) | (22,103) |
| Value of in-force insurance business written  |          |          |
| since June 1999                               | 33,127   | 29,752   |
| Cost of holding the required solvency margin  | (4,297)  | (2,202)  |
|                                               |          |          |
| Embedded Value                                | 37,248   | 19,078   |
|                                               |          |          |
| Value of one year's new business              | 4,331    | 4,681    |
| Cost of holding the required solvency margin  | (418)    | (429)    |
|                                               |          |          |
| Value of one year's new business after        |          |          |
| cost of solvency                              | 3,913    | 4,252    |

In RMB millions; figures may not be additive due to rounding

The adjusted net asset value is based on the audited shareholders net assets of the Group as measured on a PRC statutory basis. The values placed on certain assets have been adjusted to the market values. It should be noted that the adjusted net asset is for the whole Group, including our life company, property and casualty company, and other business units, while the value of in-force and the value of one year's new business presented are only in respect of Ping An Life and not the other business units.

# **Embedded Value**

## **Key Assumptions**

The assumptions used in the embedded value calculation in 2004 have been made on a "going concern" basis, assuming continuation of the economic and legal environment currently prevailing in the PRC. The statutory reserving basis and solvency margin requirement were assumed in the calculation. Certain portfolio assumptions were based on the Group's own recent experience as well as considering the more general PRC market and other life insurance markets' experience. The principal bases and assumptions used in the calculation are described below:

#### Risk Discount Rate

The non investment-linked life insurance fund earning rate, adjusted for tax, or the specified risk discount rate of 12.5% has been assumed in each future year as the risk discount rate for the in-force life business. Which option is taken for any future year depends on which of these rates gives the lower value of in-force business as of the beginning of that year. In particular, the specified risk discount rate approach for the in-force business is to avoid understating the effect of losses arising from those high interest rate guaranteed products we sold prior to June 1999. With respect to the calculation of one-year's new business value, the specified risk discount rate of 12.5% has been assumed.

#### Investment Returns

Future investment returns have been assumed to be 4.35% in 2005 and increased 0.1% every year to 4.75% in 2009 and thereafter for the non-investment linked fund. For the investment-linked fund, a 5.25% per annum investment return has been assumed. These returns have been derived by consideration of the Group's current and expected future asset allocations and associated investment returns for a range of major asset classes.

#### Taxation

A 18.5% average income tax rate has been assumed. In addition, a 5.5% business tax rate has been applied to the gross premium of the short-term accident business.

#### Mortality

Mortality rates have been based on 75% (in the case of males) and 70% (in the case of females) of the standard industry mortality tables published by the CIRC for non annuitants, with a five-year selection period. For annuitants, 75% of these standard industry mortality tables has been assumed.

#### Morbidity

Morbidity assumptions have been based the Group's own pricing table. The loss ratios have been assumed to be in the range of 16% and 70% for short term accident and health business.

#### Discontinuances

Policy discontinuance rates have been based on the Group's recent experience investigation. The discontinuance rates are dependent on the pricing rate and the product type.

#### Expenses

Expense assumptions have been based on the Group's most recent expense investigation. In 2004, the assumed expenses and commissions equated to around 70% of the expense allowance priced into the products. The unit maintenance expenses were assumed to increase at 2% per annum.

#### Policyholder Dividends

Policyholder dividends have been based on 70% of the interest and mortality surplus for individual life and bancassurance participating business. For group life participating business, dividends have been based on 70% of interest surplus only.

# **New Business Volumes and Business Mix**

The volume of new business sold and modeled during 2004 to calculate the one year's new business value was RMB21.7 billion in terms of annualised first year premium.

The mix of the new business measured by annualised first year premium was:

| Individual life<br>Long-term businesses<br>Short-term businesses | Percentage<br>30.1%<br>5.7% |
|------------------------------------------------------------------|-----------------------------|
| Group life<br>Long-term businesses<br>Short-term businesses      | 31.0%<br>6.8%               |
| Bancassurance<br>Long-term businesses                            | 26.4%                       |
| Total                                                            | 100%                        |

# Embedded Value

# **Embedded Value Movement**

The table below shows how our embedded value grew to more than RMB37 billion as of December 31, 2004.

| (In RMB million)                                                                  | 2004           |                                                                                                                                                           |
|-----------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Embedded value as of<br>December 31, 2003                                         | 19,078         |                                                                                                                                                           |
| Expected return on year-start<br>embedded value<br>Value of one-year new business | 1,181<br>3,913 | Normal growth of embedded<br>value during 2004.<br>Contribution from new business                                                                         |
| Risk discount rate impact                                                         | 1,380          | sold during 2004.<br>Risk discount rate used to<br>calculate the value of in-force<br>business changed due to the<br>addition of new business in<br>2004. |
| Assumption and modeling changes                                                   | 3,437          | Investment return and other portfolio assumption changes increased embedded value.                                                                        |
| Market value adjustment impact                                                    | (3,764)        |                                                                                                                                                           |
| Investment return variance                                                        | (1,321)        | -                                                                                                                                                         |
| Other experience variance                                                         | 657            | The variance between actual<br>experience and assumption, the<br>positive variance was mainly due<br>to favorable experience from<br>claims and expenses. |
| Embedded value before<br>capital changes                                          | 24,561         | Embedded value before impact<br>of capital change increased<br>28.7%.                                                                                     |
| Shareholder dividends                                                             | (592)          | Amounts paid to shareholders in the form of annual dividends.                                                                                             |
| Capital injection                                                                 | 13,279         | Net proceeds received from IPO in June 2004.                                                                                                              |
| Embedded value as of<br>December 31, 2004                                         | 37,248         |                                                                                                                                                           |

## **Sensitivity Analysis**

The Group has investigated the effect, on the value of in-force business and the value of one year's new business, of varying independently certain assumptions regarding future experience. Specifically, the following changes in assumptions have been considered:

• Risk discount rate

Assumptions

- A level 4.5% investment return for non investment-linked fund and 5.5% for investment-linked fund
- A 10% reduction in mortality and morbidity for non annuitants and loss ratios for the short-term business
- A 10% reduction in policy discontinuance rates
- A 10% reduction in maintenance expense

| (In RMB million)                          | Risk Discount Rate |                      |                    |                      |
|-------------------------------------------|--------------------|----------------------|--------------------|----------------------|
|                                           | Earned<br>Rate/10% | Earned<br>Rate/12.5% | Earned<br>Rate/15% | 12.5%                |
| Value of in-force business                | 14,606             | 12,086               | 9,972              | 13,936               |
|                                           | 10%                | 12.5%                | 15%                | Earned<br>Rate/12.5% |
| Value of one year's<br>new business Value | 4,937              | 3,913                | 3,174              | 4,989                |

| (In RMB million)                     | Value of in-force<br>business | Value of one year's<br>new business |
|--------------------------------------|-------------------------------|-------------------------------------|
| Central case                         | 12,086                        | 3,913                               |
| 4.5%/5.5% investment return          | 8,682                         | 3,814                               |
| 10% reduction in mortality           |                               |                                     |
| and morbidity rates                  | 12,175                        | 4,076                               |
| 10% reduction in policy              |                               |                                     |
| discontinuance rates                 | 12,263                        | 3,973                               |
| 10% reduction in maintenance expense | 12,787                        | 4,013                               |

Risk discount rate were earned rate/12.5% and 12.5% for in-force business and new business respectively.