



# MARKET CONSISTENT EMBEDDED VALUE REPORT

2009

Baloise Group



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## 1. INTRODUCTION

### 1.1. Basis of Preparation

Since 2001 the Baloise Group has published Embedded Value (“EV”) results for its Life Insurance businesses as supplementary information to its statutory and IFRS accounts. EV represents shareholders’ economic value of the in-force life segment business at the valuation date, excluding future new business. It measures the shareholder value that an insurance portfolio is expected to create over its lifetime, taking a long term view of profitability. This compares to other accounting standards such as IFRS which currently focus on revenues and expenses occurring during a single reporting period.

The first common international standard for EV reporting was produced by the European Insurance ‘CFO Forum’<sup>1</sup> in its May 2004 European Embedded Value Principles. At the time, these Principles were not adopted by Baloise which still published “traditional” EV (“TEV”) results. Since then EV techniques have developed, in particular to make more explicit allowance for risks related to financial markets via the application of ‘market-consistent’ techniques to provide a more consistent valuation of assets and liabilities. In June 2008 the European Insurance CFO Forum published its ‘Market Consistent Embedded Value Principles’<sup>2</sup> (“MCEV Principles”) providing a common basis for producing and disclosing MCEV results. Baloise has now developed models to apply bottom-up, market consistent techniques to projecting the profits and valuing risks on its main life insurance businesses and from 2010 onwards will report MCEV results in line with these MCEV Principles. While in October 2009 the CFO Forum issued a revision of the MCEV principles which permits the use of a liquidity premium in the reference rate, Baloise has decided not to include a liquidity premium in its initial calculation of the MCEV to ensure a transparent transition from TEV to MCEV.

This document provides details of the results, methodology and assumptions used to calculate the 2009 MCEV for the Baloise Group in accordance with the disclosure requirements of the MCEV Principles. This document also includes a comparison with the 2009 TEV results previously published by the Baloise Group, as well as a bridging analysis with the 2009 IFRS reported shareholders’ equity.

### 1.2. Covered Business

Baloise Group’s MCEV results cover all its material life insurance operations and entities, consistent with the business covered in its IFRS Life Insurance Segment as consolidated into the Group’s IFRS accounts.

A Market Consistent Embedded Value is calculated for all the life entities of the Baloise Group except for the life businesses in Croatia, Serbia and Austria which for materiality reasons have been included in Baloise’s MCEV at their IFRS equity value. The statutory book values of these three companies held within the other life companies from the Baloise Group are removed as a consolidation effect.

In accordance with the published TEV results, Baloise’s MCEV results are broken down in this report into the contributions from “Switzerland“, “International” and “Consolidation”.<sup>3</sup> Under “International” the life businesses of Belgium, Germany, Luxembourg, Liechtenstein, Austria, Croatia and Serbia are combined.

While Luxembourg and Liechtenstein are included only at their IFRS equity value in Baloise’s TEV they are included at their Market Consistent Embedded Value in Baloise’s MCEV.

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<sup>1</sup> A group representing the Chief Financial Officers of major European insurance companies

<sup>2</sup> Copyright © Stichting CFO Forum Foundation 2008

<sup>3</sup> From 2011 onwards Baloise will break down the contributions from International into the contributions from Belgium, Germany, Luxembourg, Liechtenstein and the remaining life entities.

All calculations are net of external reinsurance; results for individual operations are gross of internal reinsurance. All results reflect the interest of Baloise shareholders in the business – where Baloise does not hold 100% of the shares of a particular entity a deduction is made for the corresponding external, or minority, interest.

Although no future new business is included in the valuation<sup>4</sup>, the results are produced on the assumption that all operations remain open to new business and continue to operate in a similar manner and on a similar scale relative to the current position, i.e. on a “going concern” basis.

### 1.3. Definitions

According to the MCEV Principles the MCEV represents the present value of shareholders’ interests in the earnings distributable from assets allocated to the covered business after sufficient allowance for the aggregate risks in the covered business, where allowance for risk is calibrated to match the market price where reliably observable.

The MCEV consists of the following components<sup>5</sup>:

- Shareholders’ Net Assets (“SNA”) – the market value of assets attributed to covered business, which are not backing the liabilities from the covered business.
- Value of In-Force (“VIF”), made up of the following components:
  - Present Value of Future Profits – the present value of future post-tax shareholder profits from the assets backing the liabilities associated with the in-force covered business. Baloise calculates this value on a ‘certainty equivalent’ basis and refers to it as the Certainty Equivalent Value of Business In-Force (“CEVBF”)
  - Time Value of Financial Options and Guarantees (“TVFOG”) – an allowance for the potential impact on future shareholder cash flows of all financial options and guarantees in the in-force covered business, valued in line with similar cash flows (from a timing and risk perspective) traded in capital markets<sup>6</sup>;
  - Frictional Costs of Capital (“FCC”) reflecting the taxation and investment management costs on shareholder assets locked into the business. Baloise’s approach is to apply this cost to the whole SNA, whereas the MCEV Principles only require it to be applied to Required Capital;
  - Cost of Residual Non-Hedgeable Risks (“CNHR”) - an allowance for the potential impact on shareholder cash flows of risks, both financial and non-financial, not allowed for in the CEVBF or the TVFOG.

Baloise also refers to the CEVBF net of TVFOG as the Net Present Value of Future Profits (“NPVFP”).

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<sup>4</sup> Further details of Baloise’s approach to defining New Business are given in the Methodology section below

<sup>5</sup> Further details of Baloise’s approach to defining and calculating these items are given in the Methodology section below

<sup>6</sup> Further details on the methods employed and the Economic Scenario Generator used are given in the Methodology section below

## 2. MCEV AND MCVNB RESULTS

### 2.1. Summary - Baloise's MCEV and TEV comparison

Since 2001 the Baloise Group has published TEV results as supplementary information. From 2010 onwards the Baloise Group will publish MCEV results instead. Whereas TEV calculations tend to allow for all risks implicitly, by applying risk-adjusted discount rates to projected shareholder cash flows, MCEV aims where possible to value risks more explicitly in line with their valuation in observable markets.

Baloise has calculated both the TEV and the MCEV at year end 2009 in order to understand and reconcile the differences between their valuation approaches.

**Table 1 – TEV and MCEV Comparison at 31.12.2009**

CHF Mio.	TEV	MCEV	Change
Embedded Value	2'827	2'626	-7.1%
Value of New Business	26	47	83.8%

Baloise's MCEV is 7% lower than the previously published TEV at 31.12.2009 due to the differences between the traditional and the market consistent valuation framework<sup>7</sup> which are partly compensated by the impact that Luxembourg and Liechtenstein are included under MCEV with their embedded value and under TEV with their IFRS net assets only. Baloise's value of new business in MCEV is significantly larger than Baloise's new business in TEV mainly due to the positive contributions of Luxembourg and Liechtenstein which reported excellent growth in investment-type business volume in 2009 but were not included in Baloise's TEV new business value.

### 2.2. Baloise's MCEV 2009

A comparison of Baloise's MCEV and TEV broken down into the contributions from Switzerland, "International" and "Consolidation" as at 31.12.2009 is shown in Table 2.

**Table 2 – Baloise's TEV and MCEV at 31.12.2009**

CHF Mio.	TEV	MCEV	Change
Switzerland	2'254	1'834	-18.6%
International	657	811	23.4%
Consolidation	-83	-19	-77.6%
<b>Total</b>	<b>2'827</b>	<b>2'626</b>	<b>-7.1%</b>

Overall, Baloise's MCEV was CHF 2'626m at 31.12.2009, 7% lower than the previously published TEV. The reduction of the value can be explained by changes in the consolidation perimeter and the following differences between the traditional and the market consistent valuation framework:

- TEV captures the value of policyholder options and guarantees only implicitly in its use of risk-adjusted discount rates. MCEV, on the other hand, includes this value explicitly in line with their valuation in observable markets.
- TEV projects future shareholder cash flows using expected ('real world') returns which vary for different asset classes and determines their present value using a risk-adjusted discount rate. MCEV, on

<sup>7</sup> More details on the valuation differences and a breakdown of Baloise MCEV into geographic regions and into the different components of MCEV can be found in Section 2.2.

the other hand, accounts for all effects from uncertainties of future investment experience using a market consistent stochastic approach (see Methodology below).

- MCEV explicitly allows for the cost of residual non-hedgeable risks while TEV considers these risks only implicitly in its use of risk-adjusted discount rates and an overall cost of capital.
- In MCEV the value of 'hidden surplus' (primarily unrealized gains on assets, but also certain voluntary statutory reserves) is treated differently than in TEV which leads to differences in the value of shareholders' net assets.

The MCEV of Switzerland is 19% lower than its TEV mainly due to the explicit valuation of guarantees (both time and intrinsic value) where the low interest rate environment adversely affects the MCEV more strongly than the TEV.

The MCEV of the entities combined under "International" is 23% larger than the TEV of these entities. Here the differences in the valuation approaches are more than compensated by the impact of including Luxembourg and Liechtenstein for the first time with their Embedded Value. Under Baloise's application of TEV methodology, the TEV shown for "International" includes Luxembourg and Liechtenstein only at their IFRS net assets. The main contributors to the MCEV of the entities combined under "International" are Belgium and Germany.

The Baloise Embedded Value is the sum of the individual entity Embedded Values subject to consolidation adjustments. These adjustments result from the removal of the statutory book values of those life companies held within other Life entities included in the MCEV at IFRS equity value. Total consolidation adjustments are smaller in Baloise's MCEV than in Baloise's TEV mainly because in the MCEV these adjustments also include the effect on CNHR of diversification of risk between companies.

Baloise's MCEV can be further broken down into the following components as shown in Table 3:

CHF Mio.	Switzerland	International	Consolidation	Total
Certainty Equivalent Value of Business In-Force	1'606	563	0	2'169
Time Value of Financial Options and Guarantees	-179	-58	0	-237
Cost of Residual Non-Hedgeable Risks	-230	-76	45	-262
Frictional Costs of Capital	-51	-62	0	-113
<b>Value of In-Force</b>	<b>1'145</b>	<b>367</b>	<b>45</b>	<b>1'557</b>
Shareholders' Net Assets	689	443	-63	1'068
<b>MCEV</b>	<b>1'834</b>	<b>811</b>	<b>-19</b>	<b>2'626</b>

The components of the Value of In-Force and the definition of the Shareholders' Net Assets follow the MCEV Principles and are described in the Methodology section below.

### 2.3. Volume and Value of Baloise's New Business 2009

New business is the sale of new Life Insurance Segment contracts during the reporting year, including cash flows arising from the projected renewal of those new contracts. Its definition and the derivation of the Market Consistent Value of New Business (“MCVNB”) are discussed below under Methodology.

Table 4 shows the new business volumes, value and margins using APE (Annual Premium Equivalent)<sup>8</sup> as a measure for the volume of new business. MCVNB is calculated at the year-end, using year-end projection assumptions and is adjusted to comply with a point of sale valuation.

**Table 4 – Baloise’s New Business - Premium Volumes, Values and Margins**

CHF Mio.	APE			Value of New Business			NB Margin on APE		
	TEV	MCEV	Change	TEV	MCEV	Change	TEV	MCEV	Change
Switzerland	152	152	0.0%	21.9	16.7	-23.8%	14.4%	11.0%	-3.4% pts
International	101	352	249.2%	3.6	30.2	738.8%	3.6%	8.6%	5.0% pts
<b>Total</b>	<b>253</b>	<b>505</b>	<b>99.3%</b>	<b>25.5</b>	<b>46.9</b>	<b>83.8%</b>	<b>10.1%</b>	<b>9.3%</b>	<b>-0.8% pts</b>

Baloise’s MCVNB was CHF 46.9m at 31.12.2009, 84% larger than Baloise’s TEV new business value mainly due to the larger business volumes covered under “International” in MCEV. Luxembourg and Liechtenstein – both entities reported excellent growth in investment-type business volume in 2009 - were not included in Baloise’s TEV.

Switzerland and Liechtenstein are the main contributors to Baloise’s MCVNB at 31.12.2009. Switzerland’s MCVNB is slightly below the TEV new business value caused by the differences between the two valuation approaches, e.g. with respect to the capturing of the time value of policyholder options and guarantees.

The MCVNB of “International” profits from the outstanding growth in Liechtenstein and includes larger contributions from in particular Germany and Luxembourg.

### 2.4. Sensitivities

Sensitivities are an important part of the MCEV analysis, in order to judge those areas in which shareholder value can change with experience. The following tables show changes in Baloise’s MCEV and MCVNB resulting from changes in various economic and operating parameters. These sensitivities follow the descriptions in the MCEV Principles, see the Methodology Section for details.

**Table 5a – Baloise’s Economic Sensitivities**

CHF Mio.	Δ MCEV	Δ MCEV in %	Δ MCVNB	Δ MCVNB in %
<b>Base Value</b>	<b>2'626</b>	<b>-</b>	<b>47</b>	<b>-</b>
+100 bps to reference yields	626	24%	20	42%
-100 bps to reference yields	-905	-34%	-31	-67%
10% decrease in equity / property values	-376	-14%	-12	-25%
25% increase in equity / property implied volatilities	-77	-3%	-4	-8%
25% increase in swaption implied volatilities	-113	-4%	-6	-14%
30 bp liquidity premium	409	16%	10	22%

<sup>8</sup> APE (Annual Premium Equivalent) is the annual amount of new regular premiums plus 10% of new single premiums written.

The MCEV is highly sensitive to movements in fixed interest yields and to the inclusion of a liquidity premium since a significant part of the in-force business is traditional business in which shareholder profits are driven by a margin on future interest yields. The impact is asymmetric due to the impact of guarantees and options tending to bite more in low interest rate scenarios. The sensitivity mainly stems from Switzerland, Belgium and Germany as a large share of these businesses is traditional business with interest rate guarantees close or even below the level of interest rates at year-end 2009. For Luxembourg and Liechtenstein the contrary is true. Here the portfolio consists mainly of non-traditional products which have no interest rate guarantees. These countries hence show only a minor sensitivity to a shift in the reference yield curve.

The sensitivities of the MCVNB broadly follow those of the MCEV.

**Table 5b – Baloise’s Operating Sensitivities**

CHF Mio.	$\Delta$ MCEV	$\Delta$ MCEV in %	$\Delta$ MCVNB	$\Delta$ MCVNB in %
<b>Base Value</b>	<b>2'626</b>	<b>-</b>	<b>47</b>	<b>-</b>
10% decrease in lapse rates	30	1%	4	10%
10% decrease in maintenance expenses	139	5%	6	12%
10% decrease in initial expenses	-	-	4	10%
5% improvement in mortality assumptions - insurance	22	1%	1	3%
5% improvement in morbidity assumptions	51	2%	1	3%
5% improvement in mortality assumptions - annuity	-34	-1%	-1	-2%
1%-pt decrease for CNHR	69	3%	4	10%

Lower lapse rates tend to keep business on Baloise’s books for longer, increasing the average period over which shareholder profits are earned. In some markets this positive impact is offset by lower projected profits on surrenders. Overall the impact on Baloise’s 2009 MCEV is slightly positive (+1%). As expected, lower projected expenses tend to increase the MCEV. Mortality improvements affect different types of products in different ways. Lower mortality rates tend to increase profits on (protection) products with mortality risk (+1% on the Baloise 2009 MCEV) and reduce profits on (annuity-type) products with longevity risk (-1% on the Baloise 2009 MCEV). Improvements in morbidity increase the MCEV as expected. Baloise also provides the sensitivity of the MCEV to a different rate of capital charge for the CNHR so that analysts can make their own estimates of this cost.

The sensitivities of the MCVNB broadly follow those of the MCEV.

No sensitivity to the level of Required Capital has been provided here as Baloise calculates the FCC on the whole SNA. Hence a different level of Required Capital has a neutral impact on the overall MCEV, just affecting the way the SNA would be split between Required Capital and Free Surplus.

## 2.5. Reconciling MCEV Shareholders' Net Assets to IFRS Shareholders' Equity

The local statutory balance sheets, rather than IFRS balance sheets, are the starting point for the MCEV projections. It is possible, however, to reconcile the net assets used in determining the MCEV for Baloise's Life business with those published under IFRS, by considering the adjustments necessary to reach statutory net assets:

CHF Mio.	Total
<b>IFRS Shareholders' Equity as at 31.12.2009</b>	<b>2'226</b>
Removal of DAC & intangible assets	-240
Unrealised capital gains included in VIF instead of SNA under MCEV	-877
Difference in IFRS reserves compared to statutory reserves	-228
Other adjustments	187
<b>SNA</b>	<b>1'068</b>
CEVBF	2'169
TVFOG	-237
CNHR	-262
FCC	-113
<b>MCEV as at 31.12.2009</b>	<b>2'626</b>

The major elements of the reconciliation are as follows:

- Elimination of all Deferred Acquisition Costs (DAC) and intangible assets from the IFRS balance sheet;
- Deduction from IFRS net assets of unrealised gains that are projected in the MCEV as part of the VIF but form part of the IFRS net assets;
- Further reconciliation steps between the Statutory and IFRS balance sheets, predominantly reflecting different reserving bases.

### 3. METHODOLOGY

The MCEV is a measure of the consolidated value of shareholder investments in the covered business, determined as the value arising from the run-off of business in force at the year-end using assumptions consistent with a going concern basis. To determine the assumptions for valuing in-force business it is assumed that the company continues to write new business at levels consistent with recent years, although no value of future new business is included in the MCEV.

Projections are made of future cash flows net of external reinsurance and net of taxes over 40 years, with a split between shareholders and policyholders of the residual balance sheet at the end of the projections.

Baloise's MCEV is the sum of the Shareholders' Net Assets (SNA) and the Value of In-Force (VIF) of its Life Insurance Segment business, terms which are described further below.

The Baloise Group provides each reporting country with detailed methodological guidelines and basic economic assumptions used in the calculation of its MCEV. MCEV results are signed off against these by the local CEO.

#### 3.1. Covered Business

For the purposes of Baloise Group MCEV reporting, covered business is defined as all the business included in the Life Insurance segment of the published IFRS accounts. This includes a range of traditional and unit linked life insurance risk protection, savings / investment and retirement products distributed to individuals and companies in Switzerland and other European markets. Descriptions of terms below apply to legal entities and businesses within the Life Insurance segment.

A Market Consistent Embedded Value is calculated for Basler Leben AG<sup>9</sup> ("Baloise Switzerland"), the life business of Mercator Verzekeringen NV ("Mercator" / "Belgium"), Deutscher Ring Lebensversicherung-Aktiengesellschaft ("Deutscher Ring"), and Basler Leben AG Direktion für Deutschland<sup>10</sup> ("DfD") - together, "Germany", for Baloise Vie Luxembourg SA (including Baloise Europe Vie, together "Baloise Luxembourg") and Baloise Life Liechtenstein AG ("Ballie") in Liechtenstein. Smaller Life Companies<sup>11</sup> from the Baloise Group have been included at their IFRS equity value and the statutory book values of those Companies within other life entities removed as a consolidation effect.

#### 3.2. Components of MCEV

##### Shareholders' Net Assets

The SNA is given by the statutory shareholders' equity<sup>12</sup> plus the amount of undisclosed surplus allocated to the SNA after tax plus the pension scheme deficit / surplus cost after tax<sup>13</sup>.

The starting point for determining SNA is shareholders' equity as reported in the local statutory balance sheet. In some territories this balance sheet includes some assets at values other than market value<sup>14</sup> and some technical reserves voluntarily set up<sup>15</sup>, which together can be significant. Where relevant an 'undisclosed surplus' is determined as the sum of such hidden reserves in the assets (unrealised gains) and in the liabilities. To

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<sup>9</sup> Until 31.12.2009 Basler Lebens-Versicherungs-Gesellschaft

<sup>10</sup> Until 31.12.2009 Basler Lebens-Versicherungs-Gesellschaft Direktion für Deutschland

<sup>11</sup> These Companies are the life business of Basler Versicherungs-Aktiengesellschaft ("Basler Austria"), Basler Zivotno Osiguranje d.d. ("Basler Croatia") in Croatia and Basler Osiguranje Zivotno a.g.o. ("Basler Serbia").

<sup>12</sup> Includes dividend for the year reported on, which is payable in the following year

<sup>13</sup> See 'Employee Pension Schemes' below for details

<sup>14</sup> E.g. historical cost, lowest ever value

<sup>15</sup> E.g. financial reserves

determine the proportion of this surplus included in projections to calculate the NPVFP, appropriate assets are selected with a statutory book value exactly sufficient to back technical reserves (net of any applicable deferred acquisition costs) and funds for future appropriation and bonuses. The unrealised gains on these assets are included in the calculation of NPVFP in accordance with local rules and any relevant past practice, in particular regarding the timing of realisation and proportion of gains expected to be allocated to policyholders as bonus. Any remaining assets, together with their unrealised gains, are included in SNA.

The SNA can be split into Required Capital (RC) and Free Surplus (FS) in line with MCEV Principles 3, 4 and 5. In line with its policy of charging the same rate of FCC to the entire SNA (see 'Frictional Costs of Capital' below), Baloise does not report such a split.

#### Value of In-Force

The Value of In-Force is defined to be the Net Present Value of Future Profits (NPVFP) minus Frictional Costs of Capital (FCC) minus Cost of Non-Hedgeable Risks (CNHR). The NPVFP is given by the Certainty Equivalent Value of the Business In-Force (CEVBF) minus the Time Value of Financial Options and Guarantees (TVFOG).

These two items are described below. Both involve projections of a balance sheet consisting of local statutory liabilities and assets in line with local legal obligations, company practice due to commercial and competitive constraints and local market practice in the calculation of Embedded Values.

#### Certainty Equivalent Value of Business in-Force

Financial projections of the statutory balance sheet are carried out allowing for expected behaviour of the in-force business. The Certainty Equivalent Value of Business in Force ("CEVBF") is the present value of the expected future profits (net of tax) attributable to shareholders. It is based on the assumption that all asset classes earn the forward reference yield<sup>16</sup>, from which general investment management costs<sup>17</sup> are deducted. All best-estimate cash flows arising are discounted using the same reference yield curve (i.e. the equivalent gross reference zero yield curves). However, the existing bond portfolio is assumed to run off at the running yield, while new money is invested at the reference yield. For business with financial options or guarantees this value includes the intrinsic value of the option / guarantee.

#### Time Value of Financial Options and Guarantees

The CEVBF does not allow for asymmetries in the risks that financial outcomes for shareholders could be better or worse than expected in the CEVBF scenario, in particular where products or funds include a guarantee or option of which the policyholder could take advantage in adverse circumstances. Options and guarantees with significant financial risk explicitly valued in the MCEV include:

- Minimum guaranteed interest rates;
- Bonus options;
- Maturity guarantees;
- Guaranteed minimum death benefits (GMDB);
- Guaranteed annuity options (GAO) / conversion factor for Swiss Group business;
- Surrender options.

For products with such features a stochastic financial projection is run allowing for the range of possible scenarios for financial markets. The Time Value of Financial Options and Guarantees ("TVFOG") is calculated

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<sup>16</sup> By reference to swap rates in the relevant currency – see Economic Assumptions section below

<sup>17</sup> Excluding specific property management costs

as the difference between the average over all scenarios of the net present value of future profits to Baloise Group shareholders, and the (usually higher) value from the deterministic (certainty equivalent) projection described above under CEVBF. It therefore captures the cost to shareholders in those scenarios where the options / guarantees come into the money and are exercised.

Within the stochastic scenarios which are calculated for Switzerland, Germany and Belgium, discounting is done by deflators (stochastic discount factors) which are calibrated to produce market consistency<sup>18</sup>. These stochastic projections are performed using the TSM economic scenario generator supplied by Deloitte Capital Markets and calibrated to the reference yields (see below).

Such calculations can be particularly important to capture the potential cost to shareholders of providing support to ‘participating’ funds in order to provide the basic policyholder guarantees in scenarios where the unrealised gains and reserves such as bonus funds are exhausted (shareholder burn-through cost). In such scenarios, where assets are projected in any year to be insufficient, shareholders are assumed to inject sufficient capital to meet basic policyholder guarantees. At the end of the projection shareholders are assumed to meet any shortfall of assets against liabilities, or receive a part of any residual assets as a “liquidation dividend”, the amount of which reflects local practice and local requirements.

Where the result is not expected to be materially different from a full stochastic projection, some guarantees and options are valued using closed form solutions. This is the case for Baloise Luxembourg and Baloise Life Liechtenstein, most of whose business is unit-linked without guarantees.

#### Frictional Costs of Capital

Frictional costs of capital (“FCC”) are costs incurred by shareholders due to investment via the structure of an insurance company compared to investment as individuals, such as tax on profits within the insurance company or the costs of investment management.

Such costs on reserves held to meet expected policyholder benefits are reflected in the calculation of the NPVFP. Baloise’s MCEV and MCVNB also allow for the deduction of the following FCC on the total SNA (and not only on the RC), as at the valuation date the whole SNA is held by the Group to support it as a going concern backing both in-force business and the development of future new business:

- Taxation of the investment income on shareholders’ net assets held by the insurance company, at the rate paid locally by each entity;
- Investment expenses (net of tax relief) incurred in managing the shareholders’ net assets.

#### Cost of Non-Hedgeable Risks

The volatility of the returns on risky assets (such as stock market-listed equities), whose risk is for the most part readily hedgeable in financial markets, is reflected in the determination of the NPVFP. The MCEV also allows for the cost of volatility of non-hedgeable risk factors such as mortality, morbidity, expenses and lapse rates. As – by definition – there is no clear market for such risks, their valuation is open to interpretation. MCEV Principle 9 proposes a standard method – a ‘cost of capital’ approach - which Baloise follows.

The initial amount of capital at risk is calculated in a similar manner to the Swiss Solvency Test (SST) analytical model for insurance risk, i.e. based on a number of sensitivities and using the same correlation matrix between

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<sup>18</sup> The calibration ensures that observed market prices of key assets and derivatives are reproduced sufficiently closely when valuing using projection and discounting of cash flows under stochastic scenarios.

sensitivities. However, the assumptions used for the calculations are those from the MCEV rather than those from the SST. For example, reference yields are swap rates and not government bond rates. This initial capital at risk is then projected for future years in line with the evolution of an appropriate proxy measure such as reserves or premiums. A capital charge of 4% is applied to the resulting projected capital at risk. It represents the excess return or risk premium that a shareholder might expect on capital exposed to non-hedgeable risks. These annual charges are discounted using the reference yields and summed up to give the Cost of Non-Hedgeable Risks (“CNHR”). Allowance is made for diversification of risk between countries, product types and risk factors using a matrix of estimates of correlations between the various risks.

The CNHR also includes an allowance for the estimated potential impact on shareholder cash flows of bond defaults where this is not otherwise captured in the CEVBF or TVFOG due to the modelling approach taken for bonds with yields higher than reference yields<sup>19</sup>. This allowance is made by including a cost of capital approach for credit risk, adapted to take into account the shareholder’s share in credit risk.

### 3.3. Dynamic Actions, Bonus Policy and Policyholder Behaviour

The actions taken by policyholders and management are likely to vary in different financial scenarios. Baloise has set up Management Decision Rules for each business unit setting out its expected approach to managing, inter alia, targets for asset realizations, the choice of the investment strategy – asset allocations and mix - and setting bonuses or allocation of investment surplus depending on experience and expectations of the financial performance of the business. These Management Decision Rules can have a significant impact on the MCEV, as they define the timing of the cash flows and the distribution of income between the policyholder and the shareholder. The Rules are implemented in cash flow projections for calculating MCEV and New Business Values and have regard to:

- The behaviour of the insurance business in each country;
- The past application of discretion;
- The influence of market practice regarding that discretion;
- Past public communication; and
- Legal requirements.

#### Bonus Rates

The amount of bonus allocated to policyholders is chiefly dependent on:

- The technical result and financial return of the companies;
- The local regulatory environment, in particular regarding the existence of a ‘legal quote’;
- The guaranteed interest rate of the products;
- The policyholders' expectation given local market practice; and
- The solvency situation of the company (with respect to unrealised gains, bonus fund or financial reserves).

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<sup>19</sup> See 3.5 Asset and Liability Data below

For stochastic modelling various assumptions are varied in line with experience of the scenario being modelled. These include:

- Bonus rates are linked to the dynamic realisation of gains of the fund and the fund performance, reflecting past management behaviour and expected future behaviour in different scenarios. Bonus rates dependent on scenario-dependent projected returns follow the kind of rules described above.
- Option take-up rate(s), such as annuity take-up rates, are scenario-dependent where financial scenarios are expected to, or have in the past, affected policyholder take-up rates.
- Dynamic policyholder lapse rates are implemented where stochastic projections are performed. Where possible such lapse rules reflect the local observed past behaviour, and expected future behaviour, of policyholders.
- Dynamic asset allocation strategies are incorporated into the stochastic models, where appropriate. They reflect past behaviour, and expected future behaviour, of the management.

### 3.4. New Business

In line with MCEV Principle 10 new business is defined as covered business arising from the sale of new contracts during the reporting year, including cash flows arising from the projected renewal of those new contracts. The distinction between new business and variations on existing business is based for each product on the specific policy conditions, is consistent from year to year and corresponds to the classification used for Baloise's published new business figures. In each case account is taken of:

- The contract terms;
- Whether increments are automatic or whether additional sales effort is required;
- The manner in which management and the industry treat such cases in managing the business;
- Whether further initial commission is paid.

Values of new business are calculated using similar approaches to those applied for in-force – dependent on the type of business (participating, non-participating, unit linked) and the type of options / guarantees attached. These allow for TVFOG on new business, FCC and CNHR. Subject to appropriate allocation of assets and unrealised gains (see below) the FCC is calculated in proportion to the solvency margin in respect of new business. The CNHR for new business written during the year is derived from the CNHR for the in-force portfolio based on the respective size of the present value of future mathematical reserves for the new business and for the in-force, thus allowing for both the relative size of new business at inception and the relative size of its future development compared to the in-force.

The value calculated is of that business still in force at the end of the year, using assumptions applied at the year-end and discounted to the point of sale.

Consistent with the 'going concern' approach to calculating MCEV, for funds containing participating business the MCVNB is calculated using a marginal approach. This means that the MCVNB (before acquisition expenses to the company) is calculated by performing valuations of the portfolio at the year-end including, and excluding, new business. The MCVNB is the difference in NPVFP between the two portfolios after acquisition expenses to the company and after allowing for frictional costs and costs of non hedgeable risk related to new business and for adjustments to point of sale. Note that no proportional sharing of the unrealised capital gains between in-force and new business is done, as this would artificially increase the value added by new business.

### 3.5. Asset and Liability Data

Market values of individual investments are taken where available (“marked-to-market”), or estimated where there is no liquid market (“marked to model”), for example by discounting unquoted loan and mortgage asset proceeds. Credit risk is captured via an increase in the CNHR (as explained above).

For bonds, market and book values are calculated at each point in time in order to project the realisation of gains. The book value is amortised according to local accounting rules.

For equities, the current total book value and market value are input to projection models – future realisations are calculated at an aggregate, rather than a single stock, basis. Local regulatory and accounting frameworks, for example the ‘lowest value’ principle, are incorporated in the model where appropriate.

For property investments price and income indices are applied in projection models to the current value and income to generate changes in property values and regular income.

Other bond-like securities such as loans (including policy loans) and mortgages are modelled as separate ‘buckets’ of government bonds in their respective currency. For policy loans in Switzerland, the theoretical duration of the loans has been shortened to take into account expected policy lapses. For all other purposes these assets are modelled as regular government bonds.

Other equity-like securities such as private equity and minority participations in non-group companies, as well as alternative investments (mainly hedge funds) have been modelled as linear combinations of existing cash and equity categories, with weightings aiming to ensure that the overall volatility of the asset class is in line with market data.

When a substantial part of the assets are held in foreign currencies - in practice, only those assets of Baloise Switzerland denominated in Euro - these foreign assets are modelled explicitly (including the foreign exchange risk). For other assets denominated in foreign currency but modelled as local currency assets, modelled volatilities are adjusted to reflect the foreign exchange risk.

Liabilities are calculated in line with local statutory requirements using individual policy data. For projection purposes policies of the same product with similar term, duration and risk profile are grouped to form ‘model points’. Checks are made to ensure that modelled values are sufficiently close to those for individual policies.

### 3.6. Sensitivities

The sensitivities shown in Section 4 follow the descriptions in the MCEV Principles 17.8.

- **+ / - 100 bp to reference yields** - indicates the impact of a sudden parallel shift in the reference yields, including allowance for consequent movements in fixed interest asset values and other assumptions.
- **10% decrease in equity/property market values** - indicates the impact of a sudden change in the market-values of equity and property assets, without a corresponding change in dividend / rental yields, the situation being equivalent to a fall of 10% of the absolute amount of the future dividends or rental yields.
- **25% increase in equity/property implied volatilities** - indicates the impact of a (multiplicative, i.e. volatilities x 1.25) 25% increase in market implied equity/property volatilities on the cost of options and guarantees.
- **25% increase in swaption implied volatilities** - indicates the impact of a (multiplicative) 25% increase in market implied swaption volatilities on the cost of options and guarantees.
- **30 bp liquidity premium** - indicates the impact of applying a liquidity premium of 30 bp.

- 10% decrease in maintenance expenses – indicates the impact of a reduction in the projected future cost of administering contracts, with no change in inflation assumptions.
- 10% decrease in initial expenses – indicates the impact of a reduction in the cost of acquiring new business, including initial commissions.
- 10% decrease in lapse rates – indicates the impact of a (multiplicative) reduction in projected lapse / surrender rates. Depending on the terms for lapses the impact on MCEV and on MCVNB could be positive or negative for different types of contracts or for an individual contract at different times.
- 5% improvement in mortality rates – indicates the impact of a (multiplicative) reduction in deaths at all ages. The distinction is made between death coverage and annuity contracts where the risk to shareholder cash flows is from higher (death coverage) versus lower (annuities) mortality.
- 5% improvement in morbidity rates – indicates the impact of a (multiplicative) reduction in disability insurance claims incidence rates at all ages.
- 1%-pt decrease in capital charge for CNHR – indicates the impact of changing the rate of charge for capital for non-hedgeable risks from 4% to 3%.

The events described are assumed to occur immediately after the valuation date. The sensitivities allow for consistent changes in future cash flows and experience assumptions directly affected by the changed assumption, for example bonus rates. Each sensitivity is treated independently of the others, though in practice there is likely to be some correlation between them. The sensitivities show the impact of only one from a continuum of possible changes in the parameters tested – note that impacts may not be linear with respect to variation of any given parameter.

Sensitivity projections include the same set of dynamic management and policyholder reaction rules as the main MCEV / MCVNB projection. In more extreme scenarios, or stable long-term scenarios far away from the best estimate, policyholder behaviour might be expected to change and management might be expected to take different (mitigating) actions such as changes to pricing terms – such actions have not been included in these sensitivities. For some types of business the impacts of changing experience are mitigated by the requirement / decision to share profits and losses with policyholders.

### 3.7. Further Definitions and Assumptions

#### MCEV theory

The overall approach under MCEV aims to value future statutory profits in line with the way in which financial markets value cash flows with similar timing and uncertainty. In the absence of variations in experience (of investment performance, claims, lapses, expenses...) against that expected, in particular asymmetries in the effect of such variations on shareholder profit, this is achieved by summing SNA and using the ‘certainty equivalent’ approach (as described above) to determine a VIF. Calculation of the TVFOG as described above makes a market-based allowance for the cost to shareholders of future variation in financial market risks that are generally hedgeable, whilst the calculation and deduction of FCC and CNHR make allowance – albeit in areas for which prices are not generally visible in markets – respectively for the direct cost of holding capital within the insurance business in excess of that needed to meet reserves, and the price that shareholders require for exposing their capital to risks that are not generally hedgeable.

Beyond the approach described above no allowance is made for other costs sometimes associated with market consistent valuation of a business - ‘Agency costs’, ‘Limited liability put option’, or ‘Costs of financial distress’. Allowing for the Limited liability put option would be inappropriate under the assumption of the business as a going concern in which shareholders are assumed to contribute capital to meet shortfalls of assets over liabilities. Allowance for costs of financial distress, being largely related to future new business, is inappropriate in the context of a valuation excluding any value of future new business.

## Economic Scenario Generator

For stochastic modelling Baloise employs TSM supplied by Deloitte Capital Markets. TSM is an economic model that delivers simulations of market scenarios and deflators for all years of the projection period (currently 40 years for Baloise). At least 1,000 simulations are used in the projections (e.g. 5,000 simulations for Switzerland). The economic model is calibrated to the reference yields in such a way that modelled market values of equities, bonds and some specific swaptions and equity options, reproduced using deflator techniques, are market consistent. TSM can model several economies simultaneously (in effect EUR and CHF for Baloise).

## Consolidation Adjustments

MCEV and MCVNB are calculated as described above on an entity-by-entity basis within each country where Baloise has Life Insurance Segment business. Each entity models its business gross of intra-group reinsurance so that all intra-group reinsurance contracts consolidate out. For the smaller covered businesses – those in Austria, Croatia and Serbia - no VIF-related projections are carried out. Their MCEV is simply set equal to Baloise's share of their IFRS equity value.

The Baloise Group MCEV / MCVNB is the sum of these individual entity MCEV / MCVNB subject to consolidation adjustments to:

- Allow for stakes held in covered business by investors outside the Baloise Group;
- Remove the statutory book values of those companies within other Life entities included at IFRS equity value; and
- Allow for the effect on CNHR of diversification of risk between countries.

## Holding Companies, Service Companies and “Look Through” Principle

In the Baloise Group, all expenses incurred with regard to covered business are passed down to the life insurance entities and these costs are included<sup>20</sup> in the expenses modelled in the NPVFP. The expenses passed to the Life Insurance companies include an allocation of Head Office expenses incurred by the Baloise Holding which are split between life, non-life and asset management segments and pushed down to the respective entities. Thus expenses allowed for in the MCEV are entirely consistent with the IFRS reporting for the Life Insurance Segment of the Baloise Group.

MCEV Principles Guidance (G11.13) requires that profits for the covered business are measured on a “look-through” basis. On this basis, where services such as investment management are provided and charged for by another Group entity the cost reflected in the MCEV should be that to the group as a whole (rather than just that to the Life entity). In line with the “look-through” principle, Baloise's MCEV allows for services provided to the covered business by all suppliers – whether within the Life segment, within the Baloise Group but outside the Life segment, or external to the Baloise Group - at their cost to the Baloise Group. This approach applies to expenses allowed for in calculation of both the NPVFP and the MCVNB. Profit or loss to Baloise Group companies outside the Life Segment on services provided to the Life Segment are thereby included in the MCEV and MCVNB.

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<sup>20</sup> Except for investment expenses allowed for in FCC

## Employee Pension Schemes

For the Baloise MCEV calculation adjustments are made to the SNA in respect of any employee pension scheme surplus / deficit and ongoing obligations relative to those as calculated under IAS 19. The SNA is adjusted<sup>21</sup> to allow for:

- The net of tax shareholders' share (as some will effectively be allocated to policyholders) of the proportion allocated in respect of employees working in the Life Insurance Segment (vs. other IFRS segments) of the surplus / deficit in the pension fund as per the IAS 19 Defined Benefit Obligation ("DBO").
- Any excess / shortfall<sup>22</sup> of the IFRS future contribution rate<sup>23</sup> compared to the pension fund contributions allowed for in the statutory expense basis (which forms the basis for expenses in the NPVFP), multiplied by a Net Present Value factor to allow for its continuation over the projected run-off of in-force business, adjusted for any surplus / deficit to allow for its net of tax impact on shareholders in the Life Insurance segment.

## Employee Share Options

All employee benefits are accounted for. Wherever there is an obligation this is reflected in a market consistent liability in line with IAS19 which is included in the liabilities for the MCEV calculations. All actual expenditure is allowed for in the expense used to produce future expense assumptions.

## Currency Conversion for Group Presentation

MCEV and MCVNB calculated in local currency are converted to CHF at year-end rates and year-average rates, respectively, as disclosed below in the MCEV Assumptions Section.

## Group MCEV

Although MCEV Principles Guidance (G17.3.37-45) describes an approach to disclosure of a measure of the consolidated value of shareholders' interests in both covered business and other business segments combining covered business at MCEV and other business segments at (adjusted) IFRS net asset values, Baloise does not disclose such a 'Group MCEV'.

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<sup>21</sup> Increased for a surplus, decreased for a deficit

<sup>22</sup> Reduction / increase in SNA

<sup>23</sup> That projected to be sufficient to maintain assets at the level of the IAS19 DBO

## 4. MCEV ASSUMPTIONS

### 4.1. Economic Assumptions

Economic assumptions are updated at each valuation and, taken together, aim to ensure that projected cash flows are valued in line with similar cash flows traded on capital markets.

In financial projections for the CEVBF, the following spot rates, calibrated by reference to swap curves for the relevant currency, are used.

**Table 7 - Reference Yield Curves, 31.12.2009**

Term (years)	1	3	5	10	15	20	30
CHF	0.49%	1.19%	1.73%	2.57%	2.98%	3.10%	2.87%
EUR	1.31%	2.26%	2.84%	3.70%	4.14%	4.23%	4.00%

Baloise has not included a liquidity premium in the reference rate used to calculate the MCEV at 31.12.2009.

In addition the stochastic projections used to calculate the NPVFP use the following assumptions:

#### Equity and Property Volatilities

The equity volatility statistics shown below are based on analysis of the TSM output data, and hence show the economic projection assumptions produced by TSM for the two main currencies. The following table shows the annualised volatilities of equity indices used in the EV calculation, calibrated to market-implied volatilities of forward at-the-money 10-year EuroStoxx 50 (EUR) and SMI (CHF) capital return options.

**Table 8a - Equity implied volatility, 31.12.2009**

	Switzerland	Euro Zone
Equity implied volatility	22.12%	25.60%

Baloise also makes assumptions regarding the volatility of property investments, estimated from relevant historic return data:

**Table 8b - Property volatility, 31.20.2009**

	Switzerland	Germany	Belgium	Luxembourg
Property volatility	5.06%	4.98%	13.30%	6.27%

#### Interest Rate Volatilities

Interest volatility can be described by the implied volatility of interest rate swaptions. Swaption implied volatilities vary both by the term of the option and also the term of the underlying swap contract. The following tables show swaption implied volatilities, based on the TSM simulations used for the EV calculation, and calibrated to market-implied at-the-money swaption volatilities:

**Table 9a - Swaption implied volatilities CHF, 31.12.2009**

	5 year swap term	10 year swap term	15 year swap term	20 year swap term	25 year swap term	30 year swap term
5 year option	26.5%	22.5%	20.6%	20.1%	19.9%	19.4%
10 year option	21.2%	19.9%	19.7%	19.7%	19.2%	18.6%
15 year option	20.8%	21.0%	21.0%	20.2%	19.2%	18.2%
20 year option	25.7%	25.1%	23.4%	21.5%	19.8%	18.4%
25 year option	31.0%	27.5%	24.4%	21.9%	19.9%	18.2%
30 year option	27.6%	24.0%	21.2%	19.0%	17.3%	15.8%

**Table 9b - Swaption implied volatilities EUR, 31.12.2009**

	5 year swap term	10 year swap term	15 year swap term	20 year swap term	25 year swap term	30 year swap term
5 year option	18.2%	15.7%	14.6%	14.1%	13.8%	13.4%
10 year option	15.3%	14.4%	14.1%	13.8%	13.4%	12.9%
15 year option	15.2%	14.9%	14.5%	13.8%	13.1%	12.5%
20 year option	16.2%	15.3%	14.2%	13.2%	12.3%	11.5%
25 year option	17.2%	15.4%	13.9%	12.7%	11.8%	11.0%
30 year option	15.3%	13.5%	12.2%	11.1%	10.2%	9.5%

## Correlations

Assumptions are also derived in TSM regarding the correlations between returns on different asset classes – including equity total returns, dividend yields, inflation rates and bond yield curves. These are calibrated to averages of weekly correlations over the last 10 years between equity total returns and forward spot rates over various terms. The resulting correlations between 10-year bond and equity total returns are -0.27 (CHF) and -0.35 (EUR) at 31.12.2009.

The correlations between equity and property total returns are derived from relevant historical data. The correlations used were: +0.04 (Switzerland), +0.26 (Germany), +0.29 (Belgium) and +0.86 (Luxembourg) at 31.12.2009.

## Inflation

The average rates of annual price inflation used in projections are:<sup>24</sup>

- For projections in EUR synthetic inflation-linked bonds were used, calibrated to a target inflation of 0.5% for the short term and 2.0% for longer terms. These assumptions are mainly backed by the break even inflation of inflation linked bonds.
- For projections in CHF, in the absence of a market for inflation-linked bonds, synthetic inflation-linked bonds were used, calibrated to a target inflation of 0.5% for the short term and 1.5% for longer terms.

<sup>24</sup> In practice, slightly higher long term inflation was produced on average from TSM due to the way inflation, interest rates and currencies are correlated within the model.

**Table 10 - Inflation**

Projection Term (years)	1	2	5	10	20	40
EUR	0.49%	0.50%	0.54%	0.79%	1.45%	2.55%
CHF	0.48%	0.46%	0.77%	0.57%	1.20%	2.58%

Expenses are assumed to grow in line with price inflation. For Group contracts where contributions are salary-dependent, salaries are assumed to grow slightly above price inflation.

#### Discount Rates

For certainty equivalent projections the discount rates used are those referred to in the reference yield table above. For stochastic projections TSM discounts cash flows using a series of ‘deflators’ for each scenario. Deflators are time-dependent stochastic discount factors calibrated to give the market values of assets and thus produce market-consistent projections.

The same model is used for both the certainty equivalent projections and the stochastic projections, ensuring that the CEVBF and the TVFOG are consistent with each other.

#### Foreign Exchange Rates

For businesses operating outside Switzerland, values calculated in local currency are converted to CHF at the following rates – year-end rates 1.483 CHF per EUR for year-end items (e.g. MCEV) and year-average rates 1.510 CHF per EUR for items representing values spread throughout the year (e.g. MCVNB).

## 4.2. Taxation and Legislation

All components of tax, including tax payable on investment returns, are modelled as explicit cash flows, at the rates expected to be incurred by each entity in the Life Insurance Segment. Tax rate assumptions are summarised in the following table:

**Table 11 – Corporate Tax rate 2009**

	Switzerland	Belgium	Germany	Luxembourg	Liechtenstein
Tax rate	20.0%	34.0%	30.5%	30.8%	15.0%

Values allow for all current local regulation and any known future changes. The tax rate in Germany is a weighted average between the two German entities DfD and Deutscher Ring.

### 4.3. Operating Assumptions

#### Demographic Assumptions

Assumptions used in projections for variables such as lapse / surrender, paid-up policies, withdrawal, mortality and morbidity rates are based on analyses of Baloise's recent experience with the aim of projecting a best estimate of future experience.

Experience analyses for each of these factors are undertaken on a regular basis and attention paid particularly to the most recent experience as well as longer term trends. Adjustments are made where the experience or trends are not expected to continue in the long term.

Lapse rates are measured and projected by product type and, where possible, by duration in force. Experience analyses are normally weighted by annual premium or reserves for single premium policies rather than by numbers of policies.

Experienced mortality rates are normally investigated by sex, age and product type, weighted by sum assured or annuity rather than by numbers of policies or lives.

#### Expense Assumptions

Expense assumptions are based on allocations of all expenses incurred by the Baloise Group on Life Insurance Segment business ("Look-Through Basis" – see 3.7 above) during the reporting year, including allocations of overheads within the Segment and of Baloise Holding expenses allocated to the Segment, plus expected expense inflation. No allowance is made for any future productivity gains. In total expenses of CHF 1.8m are treated as 'one-off' or non-recurring costs. They relate to renovation costs for open-plan offices and early retirements in Switzerland.

Expenses are split into the following categories:

- Investment management expenses – allocated in projections as percentage of invested assets by reducing future investment returns.
- Acquisition costs allocated to new business consisting of:
  - Commissions;
  - Other acquisition costs.
- Maintenance costs allocated via a combination of 'unit costs' and proportional costs to the existing business, consisting of:
  - Policy maintenance costs;
  - Adjusted administration expenses;
  - Investment expenses, where these are not directly deducted from investment returns.

#### Dynamic Management Actions and Policyholder Behaviour

Management's selection of bonus rates and policyholder lapse rates are key variables for which dynamic assumptions – varying depending on the economic scenario - are applied in stochastic projections. Local application of dynamic bonus rates is consistent with current market and company practices as well as local regulatory requirements. In particular the 90% minimum legal quote for Group business in Switzerland and the "Mindestzuführungsverordnung" in Germany is respected. In the Swiss Individual business, in Belgium Luxembourg and Liechtenstein there is no legal quote. Here bonuses are essentially driven by market

competition and modelled through a target credited rate, and by constraints on the bonus fund or on statutory solvency rules.

For local application of dynamic lapse rates the yields available on government bonds are generally used as a proxy for policyholder expectations. Where bonus rates, or the earnings used to calculate them, are higher (lower) than policyholder expectations, then lower (higher) lapse rates are used in the projections since the policyholder is less (more) likely to lapse. The lapse parameters depend on the company and on the type of the policy.

Where appropriate, dynamic asset allocation strategies are incorporated into the stochastic models reflecting the past behaviour and expected future behaviour of the management.

## 5. DIRECTORS' STATEMENT

The MCEV Accounts have been prepared in accordance with the latest MCEV Principles<sup>25</sup> launched by the European Insurance CFO Forum in June 2008 and amended in October 2009. Any deviation from the MCEV Principles or interpretation is stated in the Methodology section of this report.

We hereby confirm that the data, assumptions, models and methodology used to prepare the MCEV accounts:

- Are materially accurate;
- Appropriately reflect the way the Life business is managed, as well as its regulatory constraints and market environment;
- Cover the essential drivers of the Company's profitability and risks.

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## 6. LIST OF ABBREVIATIONS

APE .....	Annual Premium Equivalent
CEO .....	Chief Executive Officer
CEVBF .....	Certainty Equivalent Value of Business in Force
CFO .....	Chief Financial Officer
CNHR .....	Cost of Non Hedgeable Risks
DAC .....	Deferred Acquisition Costs
DBO .....	Defined Benefit Obligation
ESG .....	Economic Scenario Generator
EV .....	Embedded Value
FCC .....	Frictional Cost of Capital
FS .....	Free Surplus
GAO .....	Guaranteed Annuity Option
GMDB .....	Guaranteed Minimum Death Benefit
IAS .....	International Accounting Standards
IFRS .....	International Financial Reporting Standards
MCEV .....	Market Consistent Embedded Value (= RC + FS + VIF)
MCVNB .....	Market Consistent Value of New Business
NPVFP .....	Net Present Value of Future Profits (= CEVBF – TVFOG)
PVNBP .....	Present Value of New Business Premiums
RC .....	Required Capital
SNA .....	Shareholders Net Assets (= RC + FS)
SST .....	Swiss Solvency Test
SMI .....	Swiss Market Index
TEV .....	Traditional Embedded Value
TSM .....	The Smith Model
TVFOG .....	Time Value of Financial Options and Guarantees
UL .....	Unit Linked
VIF .....	Value of In Force (= CEVBF – TVFOG – FCC – CNHR)

# Information on the Baloise Group

The Market Consistent Embedded Value Report 2009 is only published in English.

## AVAILABILITY AND ORDERING

The Market Consistent Embedded Value Report 2009 is available on the Internet at [www.baloise.com](http://www.baloise.com) as of 15 December 2010.

## INFORMATION FOR SHAREHOLDERS AND FINANCIAL ANALYSTS

You can find detailed information and data on the Baloise share, the IR agenda, the latest presentations and how to contact Investor Relations on the Internet at [www.baloise.com/investors](http://www.baloise.com/investors). The information is available in German and English.

## INFORMATION FOR MEDIA REPRESENTATIVES

At [www.baloise.com/media](http://www.baloise.com/media) you will find the latest media releases, presentations, reports, pictures and podcast files of various Baloise events as well as media contact details.

## NOTE ON FORWARD-LOOKING STATEMENTS

This publication is intended to provide an overview of Baloise's business performance. It contains forward-looking statements including forecasts of future events, plans, goals, business developments and results based on the current expectations and assumptions of the Baloise management. These forward-looking statements should be used with due caution as they contain both known and unknown risks and uncertainties and may be affected adversely by other factors. In consequence, business performance, results, plans and goals could differ materially from those presented explicitly or implicitly in these forward-looking statements. Among the influencing factors are (i) changes in the overall state of the economy, especially in key markets; (ii) financial market performance; (iii) competitive factors; (iv) changes in interest rates; (v) changes in exchange rates; (vi) changes in the statutory and regulatory framework including accounting standards; (vii) frequency and magnitude of claims and development of claims history; (viii) mortality and morbidity rates; (ix) renewals and maturity of insurance policies; (x) legal disputes and administrative proceedings; (xi) departure of key employees; (xii) negative publicity and media reports. Baloise assumes no obligation to update or revise these forward-looking statements, to consider new information, future events etc. The past performance of Baloise is no indication of future results.