

Market Consistent Embedded Value Report 2010

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1 Introduction

1.1 Basis of Preparation

Embedded value (“EV”) represents shareholders’ economic value of the inforce life and pension business of an insurance company, which is the value of the business written as of 31 December 2010. Future new business is not included.

Since 2008 Allianz discloses embedded value in line with the European Insurance CFO Forum Market Consistent Embedded Value Principles¹ (“MCEV Principles”) which was launched in June 2008 and amended in October 2009. The projection of assets and liabilities applying market consistent economic assumptions ensures a consistent valuation of assets and liabilities. In addition an explicit allowance is made for residual non-hedgeable risk.

The revision of the MCEV Principles by the CFO Forum in October 2009 permits the inclusion of an illiquidity premium in the reference rate. In order to achieve greater consistency with peers, Allianz included an illiquidity premium when calculating its 2010 embedded value. The illiquidity premium is derived from observable market data and based on the approach recommended by the CFO Forum and CRO Forum for QIS 5². 75% of the base illiquidity premium was applied to traditional participating and other businesses, including the US fixed and fixed indexed annuities. No illiquidity premium was applied to unit linked, including variable annuity businesses. Additional details on the determination and application of the illiquidity premium are described in Appendix B.

For durations where no deep and liquid markets exist, yield-curve extrapolation is applied starting at 30 years for the major currencies. The methodology is in line with EIOPA guidance and is described in Appendix B.

In alignment with the industry the cost-of-capital charge for non-hedgeable risk was decreased. The details are described in Appendix B.

This document provides details on the results, methodology and assumptions used to calculate the 2010 embedded value for the Allianz Group in accordance with the disclosure requirements of the MCEV Principles. As in previous years, we do not include look-through profits in our main values but provide them as additional information only, as we would like to retain a clear split between the segments in line with our primary IFRS accounts

Please see Appendix A for a detailed description of the MCEV methodology and Appendix E for a glossary of definitions and abbreviations.

The methodology and assumptions used to determine the 2010 embedded value results for the Allianz Group have been reviewed by Towers Watson. Their opinion is included in Chapter 4.

1.2 Covered Business

The business covered in embedded value figures includes all material Life/Health operations which are consolidated into the Life/Health segment of the IFRS accounts of Allianz Group worldwide. The main product groups are:

- Life and disability products including riders
- Deferred and immediate annuity products, both fixed and variable
- Unit-linked and index-linked life products
- Capitalization products
- Long term health products

All calculations are net of external reinsurance: results for individual regions are shown net of intra-group reinsurance with the value of such intra-group reinsurance being included in the total embedded value. Where debt is allocated to covered business, it is marked to current market value.

All results reflect the interest of Allianz shareholders in the life entities of the Group. Where Allianz does not hold 100% of the shares of a particular life entity a deduction is made for the corresponding minority interest³. Entities that are not consolidated into Allianz

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² see “QIS 5 Technical Specification – Risk-free interest rates” by CFO Forum and CRO Forum

³ Minorities are evaluated as of 31.12.2010.

IFRS accounts, i.e. entities where Allianz only holds a minority, are not included in the 2010 MCEV results. In particular the company in India is not included.

The pension fund business written outside the Life/Health segment is also not included.

2 Overview of results

As of 31 December 2010 Allianz Group's total embedded value amounted to EUR 26,422mn, 9% more than published in 2009. The value of new business written in 2010 was EUR 993mn, EUR 380mn or 62% more than the value published in 2009.

Operating MCEV Earnings were EUR 2,368mn.

MCEV Earnings for 2010 were EUR –247mn. This reflects the low interest rate and high volatility environment of 2010.

2.1 Embedded Value results

The table below shows the embedded value result split by its components: the net asset value and the value of inforce.

MCEV (Exhibit 1)

	2010 EUR mn	2009 adjusted EUR mn	2009 EUR mn	change in 2010 %
Net asset value	13,648	12,770	12,343	11
Free surplus	2,628	3,540	3,527	–25
Required capital	11,021	9,230	8,816	25
Value of Inforce	12,773	14,785	11,940	7
Present value of future profits	21,094	20,961	19,429	9
Cost of options and guarantees	–5,244	–3,297	–4,227	24
Cost of residual non-hedgeable risk	–1,449	–1,287	–1,778	–18
Frictional Cost of required capital	–1,627	–1,592	–1,485	10
MCEV	26,422	27,555	24,283	9

The 2009 adjusted results are calculated using the 2010 year-end methodology, that is the application of an illiquidity premium, yield-curve extrapolation and lower cost-of-capital charge.

The embedded value as of 31 December 2010 was EUR 26,422mn, which is 9% higher than the value of EUR 24,283mn published in 2009, after a net capital outflow of EUR 886mn.

The 2009 adjusted embedded value increased as a result of a change in methodology to achieve consistency with peers and the Solvency II regulatory framework. Lower interest rates and more volatile financial markets were other significant drivers of the change in the 2010 embedded value.

The cost of options and guarantees increased as interest rates moved closer to guarantees and market volatilities increased.

The decrease of the cost of residual non-hedgeable risk was predominantly driven by the decrease of the cost-of-capital charge. The cost-of-capital charge is better aligned with major European peers and is described in Appendix B.2.

The revision of S&P capital requirement in the USA and the impact of capital markets on internal risk capital resulted in higher capital requirements and lower free surplus.

The details of the opening adjustments as well as the drivers for the change in embedded value during the year are explained in more detail in the following sections.

2.2 New Business

Allianz's value of new business in 2010 increased by 62% since 2009.

Exhibit 2 shows the value of new business at point of sale calculated as the sum of quarterly disclosed values. Please note that values are calculated using assumptions at the start of the quarter in which the business was sold. Please refer to Appendix A.5 on our methodology for value of new business.

Value of New Business (Exhibit 2)

	2010 adjusted EUR mn	2010 EUR mn	2009 EUR mn	change in 2010 %
Value of New Business	993	787	613	62
New Business Margin¹ (in %)	2.2	1.8	1.7	0.5 -p
Present value of new business premium	44,198	44,198	36,416	21
APE Margin² (in %)	20.3	16.1	15.1	5.2 -p
Single Premium ³	28,777	28,777	21,966	31
Recurrent Premium	2,010	2,010	1,847	9
Recurrent premium multiplier ⁴	8	8	8	-2

1 New business margin = Value of new business / Present value of future new business premiums

2 APE margin = Value of new business / (recurrent premium + single premium/10)

3 In Germany single premium 2008 does not include following items for Germany: increase in quota share of co-insurance contract (EUR 95mn), Kapitalisierungsprodukt (EUR 341mn), certain special funds products (EUR 127mn) and Parkdepot business (EUR 813mn); In 2009 Parkdepot is excluded (EUR 1.766mn)

4 Recurrent Premium Multiplier = (PVNBP - single premium) / recurrent premium

For embedded value we report adjustments on 2009 results, whereas for value of new business we report adjustments on 2010 results. This is because we show adjustments on last disclosed values. For embedded value the last disclosed results were at end-2009. For value of new business, quarterly results were disclosed in 2010.

The 2010 adjusted results are calculated using the 2010 year-end methodology, that is the application of an illiquidity premium, yield-curve extrapolation and lower cost-of-capital charge. These are the disclosed value of new business results.

In spite of the low interest environment the new business margin increased. Volumes grew strongly in 2010. This resulted in a strong overall increase in value of new business, even before methodology changes.

The present value of new business premiums increased by 21 % from EUR 36,416mn to EUR 44,198mn in 2010, the increase driven mainly by the growth of single premium business. Recurring premium business also experienced good growth. Germany, USA and Asia experienced particularly high growth in premium volumes.

The move to higher margin recurring premium business in Germany and product action taken in 2009 in USA contributed to the increase in new business margin from 1.7% to 1.8% before the application of the 2010 year-end methodology.

The change in methodology, i.e. liquidity premium, yield-curve extrapolation and lower cost-of-capital charge, increased value of new business from EUR 787mn to EUR 993mn and new business margin from 1.8% to 2.2%.

Exhibit 3 below summarizes the analysis of change in the value of new business from the value published in 2009 to the 2010 value. Additional details on the drivers for the change in each region can be found in the regional analysis in Chapter 3.

Development of Value of New Business (Exhibit 3)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	613	1,7	36,416
Change in Foreign Exchange	5	0.0	1,138
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	618	1.6	37,554
Change in volume	94	0.0	5,696
Change in business mix	181	0.4	– 105
Change in assumptions	– 106	– 0.3	1,052
Value of new business as at 31 December 2010 before adjustment	787	1.8	44,198
methodology adjustment effects	206	0.5	–
Value of new business as at 31 December 2010 after adjustment	993	2.2	44,198

The initial adjustments of the value of new business of EUR 5mn reflect changes in foreign currency exchange rates in USA, Korea, Thailand, Japan and Switzerland.

Premium volume grew strongly by 21 % and impacted value of new business by EUR 94mn. Premium growth was especially strong in Germany, USA and Asia.

The business mix in Germany and USA had a positive effect on value of new business. In USA, product actions taken in 2009 resulted in a positive value of new business in 2010 after 2009's negative value. In Germany, recurring premium business was sold with a higher proportion of longer duration policies than last year. The change in business mix had an impact of EUR 181mn on value of new business.

The change in assumptions reflects the sum of four quarters' changes. Average interest rates in 2010 were lower than in 2009. The impact on value of new business of EUR – 106mn was due mainly to the decrease in interest rates.

The change in methodology, with the application of an illiquidity premium, yield-curve extrapolation and lower cost-of-capital charge, increased value of new business from EUR 787mn to EUR 993mn and new business margin from 1.8% to 2.2%.

For details on the regional development please refer to Chapter 3.

2.3 Analysis of MCEV Earnings

Exhibit 4 shows the change in embedded value and free surplus from the published value 2009 to the value as of 31 December 2010.

Analysis of Earnings of Embedded Value (Exhibit 4)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	3,527	8,816	11,940	24,283
Total opening adjustments	13	414	2,845	3,272
Foreign Exchange Variance	13	414	65	492
Acquired / Divested business	–	–	–	–
Adjustment effect of illiquidity premium	–	–	1,683	1,683
Adjustment effect of yield curve extrapolation	–	–	600	600
Adjustment effect of cost of capital charge	–	–	498	498
Adjusted Opening MCEV as at 31 December 2009	3,540	9,230	14,785	27,555
Value of new business at point of sale	–31	–	1,024	993
Expected existing business contribution				
reference rate	159	–	711	869
in excess of reference rate	1,195	–	473	1,669
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	1,658	–306	–1,352	–
on new business	–1,562	921	642	–
Experience variance	–92	94	279	282
Non-economic assumption changes	–11	9	–726	–729
Other operating variance	–171	–93	–452	–716
Operating MCEV earnings	1,145	624	599	2,368
Economic variances	–1,159	1,159	–2,620	–2,620
Other non operating variance	–11	7	10	6
Total MCEV earnings	–25	1,790	–2,011	–247
Net capital movements	–886	–	–	–886
Closing MCEV as at 31 December 2010	2,628	11,021	12,773	26,422

The **initial adjustments** included the following changes:

- **Change in foreign currency exchange rates** (EUR +492mn). In particular, the US Dollar, Swiss Franc and Korean Won moved against the Euro. The changes led to an increase in embedded value.
- **Change in methodology** (EUR +2,780mn) was comprised of three elements:
 - Application of the illiquidity premium (EUR +1,683mn)
 - Yield-curve extrapolation that affected those entities with long duration business (EUR +600mn)
 - Lower cost-of-capital charge (EUR +498mn)

The key components of the change in 2010 were as follows:

Value of new business (VNB) written in the year (EUR 993mn)

This represents the value of new business written in the year. The new business value at point of sale takes into account all expenses in connection with new business, including acquisition expense overruns. Additional details on the development of the value of new business are provided in Chapter 2.2.

– **Expected existing business contribution** was comprised of three elements.

– **Expected existing business contribution with reference rates (EUR 869mn)** shows the **unwinding of the discount on embedded value with reference rates** used in the market consistent projection. For the inforce portfolio as at the start of the year, it contains notional interest on all embedded value components for one year using the start of the year assumptions. Since the required capital reflects the undiscounted capital requirement at the end of the year, there is no unwinding effect in this column. The reference rate of interest earned on all assets backing the NAV directly increases the free surplus. The value of inforce increases as all future profits now require one year less discounting.

For the new business written during the year it contains the progression from point of sale until end of year based on point of sale assumptions.

In addition, this step contains the **release from risk with regard to options and guarantees and non-financial and residual non-hedgeable risks**. The margin for the year built into the valuation for uncertainty with regard to asymmetric financial risk and non-financial risk is released in this step.

– **Existing business contribution in excess of reference rates (EUR 1,669mn)** shows the additional earnings in embedded value consistent with management expectations for the business. In this step, based on normalized real world assumptions shown in Appendix C, risk premiums on equity, real estate and corporate bonds are expected to materialize in the first projection year 2010, whereas the reference rate assumptions are maintained unchanged for the further projection from 2011 onwards.

– **Transfer from value of inforce and required capital to free surplus** shows the effect of **the realization of the projected net profits** from the value of inforce to the net asset value. It reduces the value of inforce and increases the net asset value, but does not have any impact on the embedded value in total as it only contains the release of profits included in the value of inforce to the free surplus during the year. It also includes the projected release from required capital to free surplus.

This step is shown separately for inforce at the beginning of the period and new business written during the period. For new business, it shows the negative impact on free surplus projected to occur during the first year to the extent that initial expenses are higher than profits in the first year, and to the extent that these expenses cannot be covered through policyholder funds (EUR 642mn impact on value of inforce). The amount of additional required capital to be held for new business (EUR 921mn impact on required capital) increases the strain on the free surplus at the point of sale. **The total strain from new business** on the free surplus is the combined impact of expense strain and initial capital binding, and this sums up to EUR 1,562mn negative impact on free surplus. Taking into account the acquisition expense overrun the new business strain increases to EUR 1,593mn.

– **Experience variances (EUR 282mn):**

This item shows the impact of deviations of actual experience from expectations during the year regarding non-economic factors – for example higher or lower lapses, mortality, expenses, crediting etc. This item contains various partially offsetting items which are explained in the regional section. The main impact is from the higher than expected premium increases in Germany. This item also includes the impact of one-off costs of EUR 41 mn. One-off costs were incurred in USA, Hungary, Netherlands and Switzerland. The details for each region are described in Chapter 3.

– **Non-economic assumption changes (EUR – 729mn):**

Changes in non-economic assumptions such as those for lapses, mortality and expenses, which occurred during the year are included in this line. The main drivers for this change are the higher expected holding costs, higher lapse and expense assumptions in Germany and USA and a changed treatment of state supplemented premiums in Germany. The details for each region are described in Chapter 3.

- **Other operating variances (EUR – 716mn)** include operating impacts not included above, such as management reaction to economic changes, e.g. changes in crediting and investment strategies. Further, model changes are included in this item. In 2010, the drivers of these variances were true-ups in Germany and France. The details for each region are described in Chapter 3.

Operating MCEV earnings:

This item shows the change of the adjusted opening embedded value due to all operating drivers listed above and amounts to EUR 2,368mn or 9% of adjusted opening embedded value.

- **Economic variances (EUR – 2,620mn)** include the impact of changes in interest rates, the impact of actual development of financial markets as well as the impact of actual performance of the assets in the portfolio. It includes investment variances on new business from point of sale until end of year.

The decrease in interest rates and widening credit spreads had an impact on embedded value of EUR – 3.7bn. The rise in equity markets during the year had an impact of EUR +1.1bn. Across most regions, investment variances in the year were positive. Lower interest rates and widening credit spreads impacted both the options and guarantees and the present value of future profits. Details of the development per region are described in Chapter 3.

- **Other non-operating variances (EUR 6mn)** include mandatory regulatory changes and other changes in legislation.

Total MCEV earnings:

This item summarizes the movements during the year due to all drivers listed above and amounts to EUR – 247mn or – 1% of the adjusted opening embedded value.

- **Net capital movement (EUR – 886mn)** is net movement of dividends paid by and capital injections paid to our life companies.

2.4 Movement of Free Surplus and projected distributable earnings

The movement analysis in Exhibit 4 shows the development of the free surplus during the year, i.e. the development of the capital over and above the capital required to run the business.

The main drivers of the movement of the free surplus in the year were:

- Expected realization of profits and release of capital from inforce of EUR +3,012mn. This consists of the expected business contribution at the reference rate and in excess of reference rate as well as the transfer from VIF and required capital.
- New business strain of EUR –1,593mn including acquisition expense overruns.
- Economic and non-economic variances of EUR –1,444mn.
- Net capital movements of EUR –886mn.

The release of distributable earnings from the inforce business is more than sufficient to cover new business strain. Only in Asia, where portfolios are still in growth phase, were the projected releases from the inforce portfolio is currently insufficient to cover the new business strain. This is illustrated by acquisition expense overruns and the fact that inforce business is still young and does not yet release much required capital. With growth and maturity of these portfolios, we expect that the expense strain on the new business written in these regions will decrease and the inforce business will release more distributable earnings.

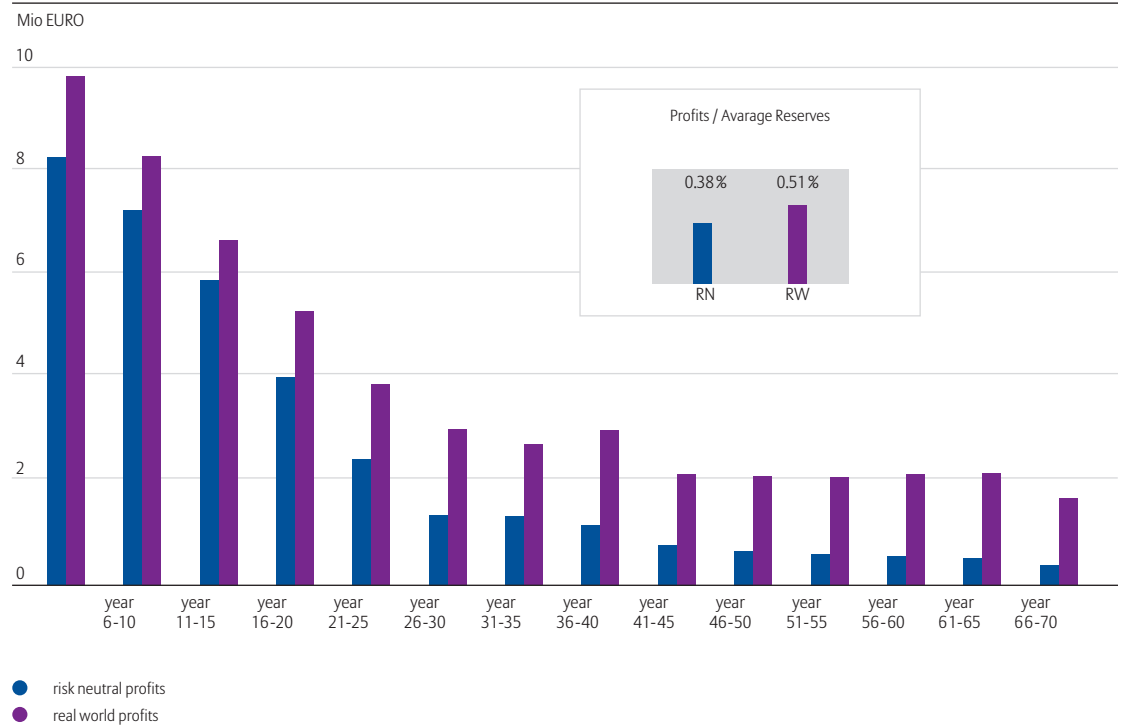
Exhibit 5 provides an overview of the expected maturity profile of distributable earnings from the current inforce book in the future. Free cashflows to shareholders are projected as the net of tax profits according to a deterministic best-estimate projection based on real-world economic assumptions as shown in Appendix C and the projected release of required capital. The following table shows the release of free cash flows to shareholders grouped in 5 year time buckets, where each bucket includes the undiscounted sum of these years. Please note that as we only show cash flows generated from the current inforce portfolio, they do not allow for any future new business strain nor future profits from additional layers of new business.

Remaining Present Value of Future Profits (Exhibit 5)

	PVFP % of initial
year 1 – 5	78
year 6 – 10	59
year 11 – 15	43
year 16 – 20	31
year 21 – 25	23
year 26 – 30	18
year 31 – 35	14
year 36 – 40	11
year 41 – 45	9
year 46 – 50	7

Timing of the cash flows depends very much on the underlying portfolio, and varies over the Group. Within Allianz there are short term portfolios e.g. short term saving or protection, as well as long term portfolios, for example annuities. The overall length of the duration of the liabilities is mainly driven by the block of long term traditional business in Germany. The projection of future profits shows a stable earnings release and return on capital over the entire projection period.

The following graph represents the pattern of risk neutral and real world profits grouped by 5 year time buckets. Risk neutral profits divided by average reserves over the entire projection period was 0.38% and the corresponding real world ratio was 0.51%.



2.5 Shareholder value not accounted for in Group IFRS Equity and Group MCEV

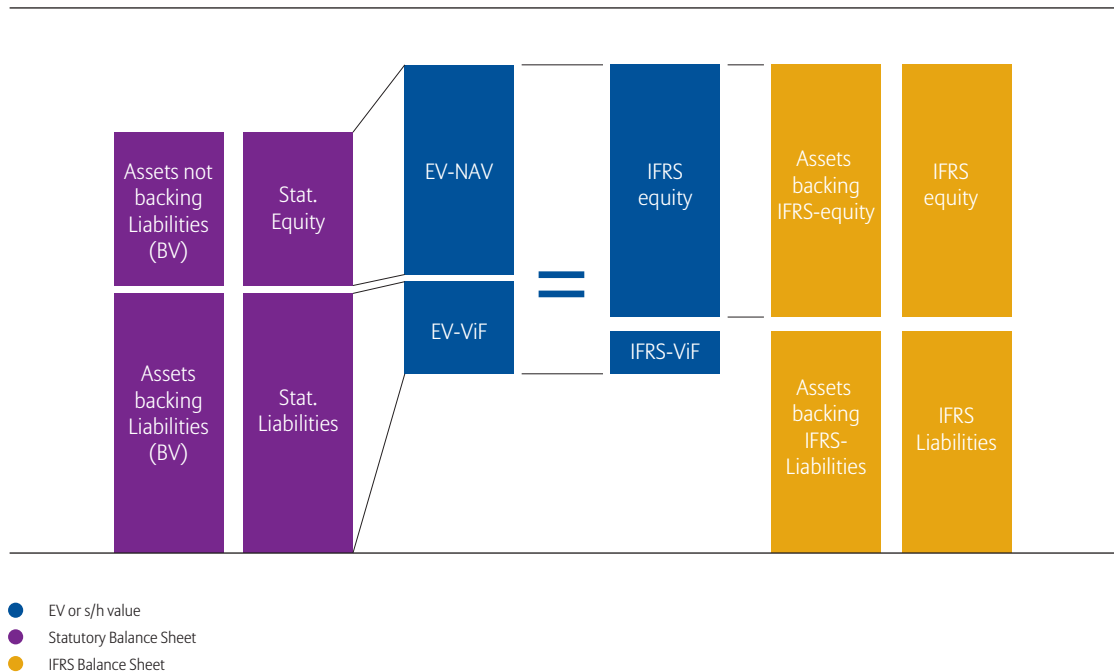
Allianz embedded value reflects the value of shareholders' interest in the life business of Allianz Group. This value includes the determination of best estimate liabilities for bonus payments and tax payments, which are derived from results based on local statutory accounting rather than on the Group's IFRS profit and loss account (P&L). Therefore local balance sheet and P&L are the starting point for the embedded value projections of our subsidiaries.

However, the result of these calculations is a balance sheet reflecting the shareholder value of the inforce business. The accounting principles applied in the projection are required to determine realistic best estimate cash-flows. Apart from this, in the definition of embedded value the local balance sheet also determines the split of the total embedded value into net asset value, i.e. the value of the assets not backing

liabilities which can also be interpreted as the equity component of the embedded value, and value of inforce i.e. the value of future profits emerging from operations and assets backing liabilities.

For Allianz Group's other segments, the shareholder value is derived from the Group's IFRS equity. Starting from the embedded value balance sheet we have determined the additional value not accounted for in IFRS equity i.e. the shareholder margin in our life business that has not yet been recognized in the Group equity. This additional value is referred to below as IFRS-ViF. As the impact of future new business is not included in the embedded value, we compare it to the IFRS equity for covered business excluding any goodwill.

For this exercise we analyzed the differences between the embedded value balance sheet and the IFRS-balance sheet, to determine elements that have been recognized in the IFRS equity but not in the EV-NAV and vice versa.



The table below shows that of the EUR 12,773mn future related element of embedded value (PVFP less O&G less CNHR less CReC), EUR 8,528mn represents an economic value of the covered life insurance business that is not captured within the IFRS shareholders' equity:

Additional Value not accounted for in IFRS equity

(Exhibit 6)

	2010 EUR mn	2009 adjusted EUR mn	2009 EUR mn
Value of Inforce	12,773	14,785	11,940
Deferred acquisition cost / value of business acquired	-14,974	-15,194	-15,194
Difference in IFRS reserves compared to statutory reserves	11,598	9,799	9,799
Shareholders' portion of unrealized capital gains included in PVFP	-4,862	-3,150	-3,150
Asset valuation differences	1,162	1,289	1,289
Other adjustments	2,831	3,477	3,477
Additional value not accounted for in IFRS shareholders' equity	8,528	11,007	8,161

The primary components of the table are as follows.

– Deferred acquisition cost / value of business acquired (EUR -14,974mn)

The excess of the IFRS amount of the deferred acquisition cost (DAC) and value of business acquired (VOBA) assets over the statutory levels included in the PVFP.

– Difference in IFRS reserves compared to statutory reserves (EUR +11,598mn)

This reserve difference is shown after offsetting the policyholders' portion of any unrealized gains or losses and asset valuation differences. Aggregate IFRS life technical and unallocated profit sharing reserves exceed statutory reserves used in PVFP modeling. The main reason for this difference is that in many local statutory accounting models, instead of setting up a deferred acquisition cost asset, the reserves are reduced to reflect part of these acquisition costs, as per local regulation. This excess of IFRS reserves increases the value not accounted for in IFRS shareholders equity. The change from last year is related to Policyholder Participation on UCG on investments not valued at market value within IFRS.

– Shareholders' portion of unrealized capital gains included in PVFP (EUR -4,862mn)

When projecting future profits on a statutory basis, the related profits/losses will include the shareholder value of unrealized capital gains/losses. To the extent that assets in IFRS are valued at market value and the market value is higher/lower than the statutory book value, these profits/losses have already been taken into account in the IFRS equity. This item is negative due to unrealized gains under local statutory accounting.

This item is negative due to unrealized gains under local statutory accounting.

– Asset valuation differences (EUR +1,162mn)

This element is the shareholder value of the difference between market value and book value of assets (valued in IFRS at book value).

– Other Adjustments (EUR +2,831mn)

This includes various items not included above related to differences in valuation under embedded value and IFRS. The decrease from 2009 to 2010 is mainly due to changes in other asset and liability positions.

Based on the MCEV for the covered business and the IFRS equity for the non covered business the Allianz Group MCEV is shown in Exhibit 7.

Group MCEV (Exhibit 7)

	2010 EUR mn	2009 EUR mn
IFRS equity for Allianz group (net of minorities)	44,491	40,166
Additional value not accounted for in IFRS shareholders' equity	8,528	8,161
Deduct Goodwill for Life/Health ¹	-2,328	-2,286
Group MCEV¹	50,691	46,041
Covered business MCEV	26,422	24,283
IFRS equity non covered business & financing adjustments	24,269	21,758

¹ MCEV principles require the inclusion of non covered business on an unadjusted IFRS basis, and therefore including Goodwill for non covered business.

The Group MCEV as of 31 December 2010 was EUR 50,691mn, which is 10% higher than the value for 2009 of EUR 46,041mn. This increase is after a dividend payment to shareholders of EUR 1,850mn in 2010.

Exhibit 8 shows the analysis of earnings of Group MCEV in line with the methodology of the MCEV principles. "Non covered" includes all segments except for Life/Health, in particular it also contains the impact of Allianz Group's financing structure as well as consolidation effects between covered and non covered business. The analysis of earnings for non covered business is based on the IFRS income statement and balance sheet, specifically operating earnings for non covered business are based on IFRS operating profit. Due to the differences in definition of operating profit for IFRS applied to non covered business and operating earnings in MCEV for the covered business we do not show a total for operating earnings and non operating earnings separately.

Analysis of Earnings of Group MCEV (Exhibit 8)

	Covered business MCEV EUR mn	Non covered business & financing adj. IFRS EUR mn	Total Group MCEV EUR mn
Group MCEV reported as at 31 December 2009	24,283	21,758	46,041
Opening adjustments	3,272	828	4,100
Adjusted Opening MCEV as at 31 December 2009	27,555	22,586	50,141
Operating MCEV earnings ¹	2,368	5,374	not meaningful
Non operating MCEV earnings ²	-2,615	-3,055	not meaningful
Non covered: IFRS net income		3,388	
Non covered: IFRS operating profit		-5,374	
Non covered: OCI		-1,069	
Total MCEV earnings	-247	2,319	2,072
Other movements in IFRS net equity	-	198	198
Closing adjustments	-886	-834	-1,720
Closing MCEV as at 31 December 2010	26,422	24,269	50,691

1 For the Non covered business IFRS Operating Profit of the Allianz Group excluding the Segment Life/Health is used as Operating MCEV earnings.

2 For the Non covered business, the Non-operating MCEV earnings are calculated as follows:

IFRS Net income of the Allianz Group attributable to Shareholders not included in covered business

./: IFRS Operating Profit of the Allianz Group excluding the Segment Life/Health

+ Changes in OCI (Unrealized Gains / Losses) of the Allianz Group attributable to Shareholders not included in covered business

Group MCEV increased by EUR 4,650mn which consists of the increase in covered business embedded value by EUR 2,139mn and the increase in non covered business by EUR 2,511 mn. Non covered business grew from operating profit of EUR 5,374mn mainly from the P/C business slightly offset by non operating items and taxes. The total movement of Group MCEV was reduced by capital movements reported as closing adjustments.

Closing adjustments include dividends paid from Allianz SE to shareholders (EUR -1.850mn) and capital increase of Allianz SE (EUR +50 mn).

2.6 Sensitivities

Sensitivity testing with respect to the underlying best estimate assumptions is an important part of embedded value calculations. Both economic and non-economic factors are tested. The same management actions and policyholder behavior have been assumed in the sensitivities as for the base case. It should be noted that the various sensitivities are in most cases correlated so that the impact of two events occurring simultaneously is not likely to be the sum of the outcomes of the corresponding tests. Where it has been determined that the impact of assumption changes is symmetrical, one-sided sensitivities are shown.

The numbers presented in the table below provide the sensitivities with regard to the primary economic and non-economic factors according to the MCEV Principles. The size of the assumption shifts are not indicative of what may or may not actually occur. In reality the factors will move in increments greater or smaller than those presented below.

At end 2010 an initiative between European peers was launched to align economic assumption setting. Due to operational reasons, we adopted a slightly

different illiquidity premium approach. The “delta to CFO Forum peers” sensitivity was introduced to show the difference between our reported embedded value and the value that would be calculated using a yield-curve based on a methodology agreed by peers. The agreed methodology includes no swap credit adjustment, includes an illiquidity premium derived using the “indirect approach” for durations up to 30 years for all currencies and has a yield curve extrapolation technique applied in accordance with EIOPA methodology. This sensitivity shows the impact of excluding the swap credit risk adjustment and applying the illiquidity premium in line with the specified methodology. In this sensitivity the cost-of-capital charge is unchanged because it is aligned with CFO Forum peers.

Please note that to reduce complexity the sensitivity analysis for the value of new business has been carried out on a central value of new business recalculated using end of year assumptions. This value of new business calculated on end of year assumptions is only EUR 44mn lower than the sum of the quarterly reported values. This demonstrates that the end of year assumption fairly represents the average of the assumptions over the year.

Sensitivities (Exhibit 9)

	Inforce MCEV		New Business VNB	
	EUR mn	%	EUR mn	%
Central Assumptions	26,422	100	949	100
Required Capital equal to local solvency capital	635	2	52	5
EV change by economic factors				
Risk Free Rate – 100bp	–4,065	–15	–259	–27
Risk Free Rate +100bp	2,089	8	162	17
Risk Free Rate –50bp	–1,726	–7	–119	–13
Risk Free Rate +50bp	1,176	4	99	10
Charge for CNHR +100bp	–445	–2	–33	–3
Equity and property values – 10%	–986	–4	–42	–4
Swaption volatilities +25%	–633	–2	–61	–6
Equity option volatilities +25%	–914	–3	–21	–2
delta to CFO Forum peers	4	–	27	3
EV change by non-economic factors				
Lapse Rates – 10%	224	1	53	6
Maintenance Expenses – 10%	750	3	64	7
Mortality – 5% for products with death risk	205	1	23	2
Mortality – 5% for products with longevity risk	–350	–1	–23	–2

A breakdown of the sensitivity results by region is provided in Chapter 3.

– **Sensitivity to capital requirement**

Using only local solvency capital requirements to determine the required capital instead of the internal required capital reduces the necessary capital and the frictional cost of holding required capital. However, for several companies the capital requirement is already determined by the local statutory requirement and therefore the embedded value increases by only EUR 635mn or 2%.

– **Sensitivity to a decrease/increase of the underlying market risk free rates**

This sensitivity shows by how much the embedded value would change if market interest rates in the different economies would fall/rise. The sensitivity is designed to indicate the impact of a sudden shift in the risk-free yield curve, accompanied by a shift in all economic assumptions including discount rates, market values of fixed income assets as well as equity and real estate return assumptions. Please note that, for consistency, yield curve extrapolation is applied in sensitivities to interest rate shifts. This means that only the deep and liquid part of yield curve is subject to a parallel shift with the ultimate forward rate being kept stable.

Due to the asymmetric and non-linear impact of embedded financial options and guarantees, falling market rates have a higher impact on embedded value than rising interest rates and the impact increases for each further step down.

As shown above a shift of – 100bps in interest rates causes a reduction of the Group's embedded value by EUR 4,065mn or 15%. This is slightly lower than the corresponding impact shown for 2009, in spite of lower rates, because of the different methodology described above. The value of new business decreases by EUR 259mn.

– **Sensitivity to an increase in the charge for residual non-hedgeable risk by 100 bps**

The effect of increasing the capital charge for residual non-hedgeable risk by 100bps decreases the

embedded value by EUR 445mn. This sensitivity is in line with 2009. Please see Chapters A.4.3 and B.2 for an explanation of the cost of residual non-hedgeable risk.

– **Sensitivity to a decrease in equity/property values at the valuation date by 10%**

This sensitivity is designed to indicate the impact of a sudden change in the market values of equity and property assets. Since the modeled investment strategies take into account a certain target allocation based on market value, this shock may lead to a rebalancing of the modeled assets at the end of the first year, when defined boundaries for each asset class are exceeded.

A drop of equity values by 10% reduces embedded value by EUR 986mn, in line with the sensitivity of 2009.

– **Sensitivity to an increase in volatilities for fixed income and for equity incl. real estate by 25%**

This sensitivity shows the effect of increasing all volatilities, i.e. swaption implied volatilities, and equity option implied volatilities including real estate volatility, by 25% of the assumed rate. As an increase in volatilities leads to a higher time value of options and guarantees for traditional participating business, embedded value decreases by EUR 633mn or 2% for an increase in swaption implied volatility and by EUR 914mn or 3% for an increase in equity option implied volatility. This sensitivity moved broadly in line with underlying O&G values.

– **Sensitivity of delta to CFO Forum peers**

The application of the different yield-curve would increase embedded value by EUR 4mn. The low sensitivity demonstrates that our illiquidity premium approach produces a result that is not materially different to what would have been produced if the industry approach had been used.

- **Sensitivity to a decrease in lapse rates by 10%**
The impact of a 10% proportionate decrease in projected lapse rates is an increase in embedded value of EUR 224mn or 1%. This sensitivity is similar to last year.
- **Sensitivity to a decrease in maintenance expenses by 10%**
The impact of a 10% decrease in the projected expenses on embedded value is EUR 750mn or 3% as future projected profits would increase. This sensitivity is similar to last year.
- **Sensitivity to a decrease in mortality and morbidity rates by 5%**
This sensitivity shows the impact of a decrease by mortality and morbidity rates of 5%. Higher mortality has a negative impact in products with mortality risk (e.g. endowments and term life products) and a positive impact in products with longevity risk (life annuities). Since the future experience for the different insured populations in the two product groups might vary significantly the impact of this sensitivity is shown separately. For products with mortality risks the impact of decrease in mortality rates by 5% leads to an increase of EUR 205mn or 1%. The impact on products with longevity risk is a decrease in value of EUR 350mn or 1%. This impact is low as it is mitigated by the ability to share technical profits and losses with the policyholder, particularly in Germany.

3 Regional analysis of Embedded Value

3.1 Overview

The following tables provide an overview of the contribution of the various operating entities and regions to the embedded value results and to the value of new business of the Allianz Group. A detailed analysis for each region is provided in the following sections.

The regions are defined as follows:

German Speaking Countries:

- **Germany Life** includes Allianz Lebensversicherungs AG; its subsidiaries are included at equity.
- **Germany Health** is Allianz's health business Allianz Private Krankenversicherung
- Life operations in **Switzerland** and **Austria**.

Europe:

- Life operations in **France** including partnerships.
- Italian and Irish life subsidiaries of **Italy**.
- Life operations in **Spain, Belgium, Netherlands, Portugal, Greece** and **Turkey**.

Growth Markets:

- Central and Eastern European life operations in **Slovakia, Czech Republic, Poland, Hungary, Croatia, Bulgaria** and **Romania**.
- North African life operations in **Egypt**.
- Asia-Pacific life operations in **Korea, Taiwan, Thailand, China, Indonesia, Malaysia** and **Japan**.
- The non-consolidated life operation in India is not included.
- **Allianz Global Life**.

USA:

- **Allianz Life US**.

Holding:

- **Holding** includes the impact of holding expenses and internal life reinsurance.

In the following sections, the analysis is presented for each region set out above, with specific focus on our larger life operations in the following countries:

- Germany
- France
- Italy

Exhibit 10 provides an overview of the 2010 embedded value by region and a break down of the components:

Embedded Value Results by region (Exhibit 10)

	German Speaking Countries		Europe			Growth Markets			USA	Holding	Total
	EUR mn	Germany Life EUR mn	EUR mn	France EUR mn	Italy EUR mn	EUR mn	Asia-Pacific EUR mn	CEEMA EUR mn	EUR mn	EUR mn	EUR mn
Net asset value	3,169	1,805	5,395	2,040	1,878	1,425	1,002	394	3,654	5	13,648
Free surplus	1,184	585	1,399	390	852	-295	-572	268	435	-94	2,628
Required capital	1,985	1,220	3,997	1,650	1,026	1,720	1,574	125	3,220	99	11,021
Value of Inforce	8,169	6,170	3,837	2,563	884	379	-89	457	772	-384	12,773
Present value of future profits	12,650	10,032	5,451	3,319	1,290	1,044	473	551	2,233	-284	21,094
Cost of options and guarantees	-3,314	-3,048	-663	-260	-241	-170	-112	-54	-1,011	-86	-5,244
Cost of residual non-hedgeable risk	-657	-541	-385	-155	-83	-294	-262	-29	-107	-6	-1,449
Frictional Cost of required capital	-510	-273	-566	-341	-82	-202	-189	-10	-342	-7	-1,627
MCEV	11,337	7,975	9,232	4,603	2,762	1,804	913	851	4,427	-378	26,422
in % of total MCEV	43	30	35	17	10	7	3	3	17	-1	100
Value of Inforce by product type											
Traditional	7,589	5,717	2,829	2,258	422	-331	-614	283	295	-420	9,962
Unit Linked	562	437	1,003	305	457	625	445	169	-732	37	1,495
Index Linked	17	15	5	-	5	85	80	5	1,209	-	1,316

The embedded value of the group increased by EUR 2.8bn as a result of the change in methodology. EUR 1.6bn of the increase is from the German Speaking Countries.

The application of the illiquidity premium had the largest impact in Germany and the USA with increases of EUR 0.8bn and EUR 0.4bn respectively.

The yield-curve extrapolation affected those entities with longer duration business. The yield-curve extrapolation had the largest impact for Germany Life and Switzerland with increases of EUR 0.4bn and EUR 0.1bn respectively.

The impact of the change in cost-of-capital charge is explained on the regional sections.

In most regions positive investment variances during the year were offset by lower interest rates and higher market volatilities.

Exhibit 11 provides an overview of the ratios between required capital and reserve / solvency requirement.

Required capital (Exhibit 11)

	2010			2009		
	Required Capital EUR mn	% of Reserve %	% of Solvency Requirement %	Required Capital EUR mn	% of Reserve %	% of Solvency Requirement %
German Speaking Countries	1,985	1.2	286	1,811	1.2	303
thereof: Germany Life	1,220	0.9	not meaningful	1,145	0.9	not meaningful
Europe	3,997	3.4	117	3,269	3.0	113
thereof: France	1,650	2.6	100	1,281	2.1	100
thereof: Italy	1,026	2.9	100	956	2.9	100
Growth Markets	1,720	8.0	418	1,280	7.7	273
thereof: Asia-Pacific	1,574	8.7	572	1,135	8.3	339
thereof: CEEMA	125	4.3	108	138	5.1	109
USA	3,220	5.5	259	2,365	4.8	421
Holding and Internal Reinsurance	99	7.6	100	91	6.6	100
Total	11,021	3.0	188	8,816	2.7	191

Required capital increased by EUR 2,204mn to EUR 11,021mn in 2010. The increase was driven by lower interest rates, higher volatilities and local solvency changes, described in the regional sections. The increase is mostly driven by higher requirements in USA, France and Korea.

Please note that for Germany additional capital on top of Allianz's internal required capital and solvency capital is allocated to better reflect local market standards. The required capital proportional to the reserve is still low due to high policyholder resources admissible for solvency purposes and the high value of in-force available as an eligible source of capital for internal capital purposes. Please see Appendix A.3 on the required capital definition.

Exhibit 12 provides an overview over the new business values 2010, the split by product type and the most important KPIs by region:

2010 Value of New Business at point of sale by region

(Exhibit 12)

	German Speaking Countries		Europe			Growth Markets			USA	Holding	Total
	EUR mn	Germany Life EUR mn	EUR mn	France EUR mn	Italy EUR mn	EUR mn	Asia-Pacific EUR mn	CEEMA EUR mn	EUR mn	EUR mn	EUR mn
Value of New Business	403	362	316	107	142	192	126	60	158	-76	993
in % total VNB	41	36	32	11	14	19	13	6	16	-8	100
New Business Margin in %	2.8	3.0	2.2	1.7	2.4	2.4	1.9	5.3	2.0	n/a	2.2
Present value of NB premium	14,188	11,997	14,159	6,266	5,925	7,859	6,452	1,142	7,991	-	44,198
APE Margin ² in %	31.4	33.0	20.5	17.0	21.3	15.3	11.8	35.5	19.7	n/a	20.3
Single Premium ³	5,856	5,372	10,493	4,636	4,886	4,636	3,861	510	7,793	-	28,777
Recurrent Premium	700	560	493	167	178	794	675	119	22	-	2,010
Recurrent Premium multiplier ⁴	12	12	7	10	6	4	4	5	9	-	8
IRR in %	17.8	17.8	12.3	8.8	17.2	16.4	14.1	26.2	16.5		
Payback Period (in years)	5,4	5,5	6,1	9,0	4,1	4,9	5,9	2,9	5,9		
Value of New Business by product type											
Traditional	375	337	234	99	71	93	57	36	-5	-94	603
Unit Linked	29	25	82	8	71	82	51	24	39	17	249
Index Linked	-	-	-	-	-	17	17	-	123	-	140
New Business Margin by product type											
Traditional in %	2.8	2.9	2.3	1.8	2.2	4.5	4.0	5.5	-1.3	n/a	2.3
Unit Linked in %	4.7	4.9	2.1	1.0	2.6	1.6	1.2	5.0	1.6	n/a	2.1
Index Linked in %	0.7	n/a	n/a	n/a	n/a	2.5	2.5	5.7	2.4	n/a	2.4

1 Index Linked in the US also includes a small block of fixed annuity products

2 APE margin = Value of new business / (recurrent premium + single premium/10)

3 In Germany single premium for Germany Life in 2009 does not include Parkdepot (EUR 1,766mn)

4 Recurrent Premium Multiplier = (PVNB - single premium) / recurrent premium

New business volumes in 2010 were above the level achieved in 2009. The present value of new business premiums increased by 21 % in 2010, the increase

driven mainly by the growth of single premium business. Regular premium business also grew in 2010. Germany, USA and Asia experienced particularly high growth in premium volumes.

The move to high-margin regular premium traditional business in Germany and product management actions taken in 2009 in the USA contributed to the increase in new business margin from 1.7% to 1.8%.

The increase in value of new business due to strong volume growth and positive business mix was however offset by the negative impact of lower interest rates.

The weaker Euro against the US Dollar increased value of new business by EUR 5mn.

The payback period is the period from the point of sale of new business to the first point in time when the undiscounted sum of distributable earnings, under real world assumptions, is positive.

For more detailed information on each region please refer to the regional analysis in the following sections.

3.2 German Speaking Countries

The embedded value of the German Speaking Countries increased from EUR 11,088mn to EUR 11,337mn. The increase was driven by the change in methodology and the impact of financial market conditions.

3.2.1 Development of Value of New Business

The value of new business written by the German Speaking Countries in 2010 was EUR 403mn, 7% higher than the value published in 2009. Exhibit 13 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 13)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	376	3.1	12,052
Change in Foreign Exchange	3	0.0	202
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	379	3.1	12,254
Change in volume	51	0.0	1,664
Change in business mix	26	0.2	–
Change in assumptions	–143	–1.1	271
Value of new business as at 31 December 2010 before adjustment	314	2.2	14,188
methodology adjustment effects	90	0.6	–
Value of new business as at 31 December 2010 after adjustment	403	2.8	14,188

The increase in value of new business is driven by Germany Life. The factors driving the increase for Germany Life are discussed in more detail in the next section. The new business values in Germany Health, Switzerland and Austria decreased. The decreases were driven mainly by lower interest rates.

Change in foreign exchange rates increased value of new business. This was due to the weakening of the Euro against the Swiss Franc.

Value of new business was further increased by a change in business mix. This is driven mainly by business mix changes in Germany Life.

Changes of assumptions had a negative impact on value of new business. The changes were mainly with respect the decrease in interest rates.

The application of an illiquidity premium, yield-curve extrapolation and lower cost-of-capital charge had a positive impact on value of new business.

3.2.2 Development of Embedded Value and Free Surplus

The embedded value for the German Speaking Countries increased from EUR 11,088mn to EUR 11,337mn after dividend payments of EUR 583mn. Germany Life paid dividends of EUR 461mn, Germany Health EUR 72mn, Switzerland EUR 40mn and Austria EUR 10mn.

The analysis of earnings in Exhibit 14 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 14)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	1,065	1,811	8,212	11,088
Total opening adjustments	65	68	1,655	1,788
Foreign Exchange Variance	65	68	87	220
Acquired / Divested business	–	–	–	–
Adjustment effect of illiquidity premium	–	–	807	807
Adjustment effect of yield curve extrapolation	–	–	553	553
Adjustment effect of cost of capital charge	–	–	208	208
Adjusted Opening MCEV as at 31 December 2009	1,130	1,879	9,867	12,876
Value of new business at point of sale	–	–	403	403
Expected existing business contribution				
reference rate	33	–	417	451
in excess of reference rate	9	–	105	115
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	807	2	–809	–
on new business	–250	72	179	–
Experience variance	–26	6	183	162
Non-economic assumption changes	–	–	–644	–644
Other operating variance	–	6	–751	–746
Operating MCEV earnings	573	85	–917	–258
Economic variances	63	20	–782	–698
Other non operating variance	–	–	–	–
Total MCEV earnings	637	106	–1,698	–956
Net capital movements	–583	–	–	–583
Closing MCEV as at 31 December 2010	1,184	1,985	8,169	11,337

Germany Life is the main driver of the German Speaking Countries' result. Germany Life is described separately in the following section. The remaining constituents will be the focus of this section.

Opening adjustments reflect the impact of foreign exchange movements, the application of an illiquidity premium, yield-curve extrapolation and the lower cost-of-capital charge.

The foreign exchange variance of EUR 220mn reflects the weakening of the Euro against the Swiss Franc during 2010.

The application of an illiquidity premium had an impact of EUR 807mn on embedded value. The base illiquidity premium in Germany and Austria was 59bps. In Switzerland the base illiquidity premium was 7bps. 75% of the base illiquidity premium is applied when valuing traditional and other businesses. No illiquidity premium is applied when valuing unit-linked business although the –10bps swap credit risk adjustment is applied.

The application of the illiquidity premium in Switzerland had an impact of EUR –18mn. The impact was slightly negative because the effect of the –10bps swap credit risk adjustment to the entire yield-curve outweighed the relatively low illiquidity premium applied to the liquid part of the curve.

The implementation of the yield-curve extrapolation had an impact of EUR 553mn on embedded value.

The decrease of the cost-of-capital assumption had an impact of EUR 208mn on embedded value.

MCEV earnings were –7% of the adjusted opening embedded value. The change was driven mainly by lower interest rates and higher volatilities. Investment variances during the year however had a positive impact.

Earning the risk-free reference rate on the inforce portfolio increased embedded value by EUR 451mn. Expected returns in excess of the risk-free rate increased embedded value by a further EUR 115mn.

The new business strain was EUR 250mn. The relatively low new business strain is a result of Germany's business model. The topic is discussed in the Germany Life section.

Experience variances of EUR 162mn mainly reflect the positive impact due to higher than expected premium increases for Germany Life. Positive expense experience for Germany Health also contributed to much of this part of the result. Switzerland incurred one-off costs of EUR 5mn.

Assumption changes impacted embedded value by EUR –644mn. The changes were driven by Germany Life, and are described separately.

Other operating variances of EUR –746mn were mainly as a result of true-ups. The updating of year-end 2009 modelled volatilities increased O&G values with a corresponding decrease in embedded values. Model updates, mainly in respect of asset true-ups, resulted in further impacts on embedded values.

Economic variances of EUR –698mn were driven mainly by lower interest rates, increased volatilities and positive investment variances in Germany and Switzerland. The decrease in interest rates and increase of volatilities from 2009 to 2010 impacted embedded value by EUR –2,300mn. Positive investment variances during the year however had an impact of EUR 1,613mn.

3.2.3 Sensitivities

Exhibit 15 shows the sensitivities for the German Speaking Countries' embedded value and value of new business:

Sensitivities (Exhibit 15)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	11,337	100	359	100
Required Capital equal to local solvency capital	326	3	20	6
EV change by economic factors				
Risk Free Rate – 100bp	–2,920	–26	–162	–45
Risk Free Rate +100bp	1,568	14	141	39
Risk Free Rate –50bp	–1,291	–11	–85	–24
Risk Free Rate +50bp	858	8	83	23
Charge for CNHR +100bp	–202	–2	–15	–4
Equity and property values – 10%	–461	–4	–21	–6
Swaption volatilities +25%	–253	–2	–46	–13
Equity option volatilities +25%	–430	–4	8	2
delta to CFO Forum peers	74	1	23	7
EV change by non-economic factors				
Lapse Rates – 10%	47	–	–7	–2
Maintenance Expenses – 10%	273	2	19	5
Mortality – 5% for products with death risk	20	–	2	1
Mortality – 5% for products with longevity risk	–258	–2	–23	–6

The sensitivities are driven by the response of Germany Life's results to the shocks. Germany Life is described separately in the following section.

Non-economic sensitivities are not calculated for Germany Health because the health business has the ability to adjust premiums in response to assumption changes.

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on embedded value than rising rates. Interest rate sensitivities in 2010 are in line with those of 2009. Volatility sensitivities move broadly in line with the change in O&G from 2009 to 2010.

Value of new business is calculated using a marginal approach. The approach may lead to some counter intuitive sensitivities and distortions from one year to the next. New business guarantees are lower than inforce guarantees so that the addition of new busi-

ness to the portfolio reduces the overall guarantee level, which can become more valuable in distressed scenarios applied in some sensitivities.

3.3 Germany Life

The embedded value of Allianz Germany Life decreased from EUR 8,155mn to EUR 7,975mn. The change was driven by positive investment variances during the year that were offset by a decrease in interest rates and increase in interest and equity volatilities.

3.3.1 Development of Value of New Business

The value of new business written by Germany Life in 2010 was EUR 362mn, 6% higher than the value published in 2009. The new business margin changed from 3.5% to 3.0%. Exhibit 16 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 16)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	340	3.5	9,817
Change in Foreign Exchange	–	0.0	–
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	340	3.5	9,817
Change in volume	66	0.0	1,905
Change in business mix	16	0.1	–
Change in assumptions	–139	–1.2	275
Value of new business as at 31 December 2010 before adjustment	284	2.4	11,997
methodology adjustment effects	78	0.6	–
Value of new business as at 31 December 2010 after adjustment	362	3.0	11,997

Value of new business increased due to increased premium volumes during 2010. Recurring premium business in particular increased.

Value of new business was further increased by a change in business mix. There was a move to recurring premium business, increased volumes in the “Sondertarife” portfolio and a higher proportion of policies with longer durations. The Sondertarife portfolio comprises retirement products with death benefits that are sold mostly as group policies. Changes of assumptions had a negative impact on value of new business. The changes were mainly with respect to the decrease in interest rates.

The application of an illiquidity premium, yield-curve extrapolation and lower cost-of-capital charge had a positive impact on value of new business.

3.3.2 Development of Embedded Value and Free Surplus

The embedded value for Germany Life decreased from EUR 8,155mn to EUR 7,975mn after a dividend payment of EUR 461mn.

The analysis of earnings in Exhibit 17 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 17)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	594	1,145	6,416	8,155
Total opening adjustments	–	–	1,261	1,261
Foreign Exchange Variance	–	–	–	–
Acquired / Divested business	–	–	–	–
Adjustment effect of illiquidity premium	–	–	659	659
Adjustment effect of yield curve extrapolation	–	–	422	422
Adjustment effect of cost of capital charge	–	–	180	180
Adjusted Opening MCEV as at 31 December 2009	594	1,145	7,677	9,416
Value of new business at point of sale	–	–	362	362
Expected existing business contribution				
reference rate	25	–	368	392
in excess of reference rate	–7	–	69	62
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	653	11	–664	–
on new business	–220	55	164	–
Experience variance	–4	–	134	130
Non-economic assumption changes	–	–	–744	–744
Other operating variance	1	2	–768	–765
Operating MCEV earnings	448	68	–1,080	–564
Economic variances	4	6	–427	–417
Other non operating variance	–	–	–	–
Total MCEV earnings	452	75	–1,507	–980
Closing adjustments				
Net capital movements	–461	–	–	–461
Closing MCEV as at 31 December 2010	585	1,220	6,170	7,975

Opening adjustments reflect the impact of the application of an illiquidity premium, yield-curve extrapolation and the lower cost-of-capital charge.

The application of an illiquidity premium had an impact of EUR 659mn on embedded value. The base illiquidity premium was 59bps. 75% of the base illiquidity premium is applied when valuing traditional and other businesses. No illiquidity premium is applied when valuing unit-linked business although the –10bps swap credit risk adjustment is applied.

Because Germany's business has a liability duration beyond 30 years, the yield-curve extrapolation has an impact on embedded value. The impact was EUR 422mn.

The change of the cost-of-capital assumption from 4.5% to 3.25% had an impact of EUR 180mn on embedded value.

MCEV earnings were –10% of the adjusted opening embedded value. The change was driven mainly by lower interest rates and higher volatilities. Investment variances during the year however had a positive impact.

Earning the risk-free reference rate on the inforce portfolio increased embedded value by EUR 392mn. Expected returns in excess of the risk-free rate increased embedded value by a further EUR 62mn.

The new business strain was EUR 220mn. The new business strain is low compared to other markets and reflects the impact of Germany's open-fund business model, where new and inforce business are managed in a single fund. The structure allows for the offset of new business strain against technical profits from the inforce portfolio before profit sharing.

Experience variances of EUR 130mn mainly reflect the positive impact due to higher than expected premium increases.

Assumption changes impacted embedded value by EUR –744mn. The main driver was the change in the treatment of "Riesterzulagen" in 2010 with an impact of EUR –358mn on embedded value. In the past, future state supplements to premiums were considered in the embedded value calculations. From 2010, only the current year's premiums are considered. This approach is in line with new business reporting. Changed lapse, dynamic policyholder behaviour and expense assumptions had a further impact of EUR –300mn on embedded value.

Other operating variances of EUR –765mn were mainly as a result of true-ups. The updating of year-end 2009 modelled volatilities increased O&G by EUR 400mn with a corresponding decrease in embedded value. Model updates, mainly in respect of asset true-ups, resulted in a further impact of EUR –300mn on embedded value.

Economic variances of EUR –417mn were driven mainly by positive investment variances, lower interest rates and increased volatilities. The decrease in interest rates from 2009 to 2010 impacted embedded value by EUR –777mn. The increase in interest and equity volatilities further impacted embedded value by EUR –642mn. Positive investment variances during the year however had an impact of EUR 982mn.

3.3.3 Sensitivities

Exhibit 18 shows the sensitivities for Germany Life's embedded value and value of new business:

Sensitivities (Exhibit 18)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	7,975	100	318	100
Required Capital equal to local solvency capital	272	3	20	6
EV change by economic factors				
Risk Free Rate – 100bp	–2,378	–30	–151	–47
Risk Free Rate +100bp	1,125	14	132	42
Risk Free Rate – 50bp	–1,020	–13	–78	–24
Risk Free Rate +50bp	624	8	77	24
Charge for CNHR +100bp	–166	–2	–13	–4
Equity and property values – 10%	–345	–4	–18	–6
Swaption volatilities +25%	–196	–2	–44	–14
Equity option volatilities +25%	–406	–5	8	3
delta to CFO Forum peers	68	1	22	7
EV change by non-economic factors				
Lapse Rates – 10%	51	1	–6	–2
Maintenance Expenses – 10%	237	3	17	5
Mortality – 5% for products with death risk	14	–	1	–
Mortality – 5% for products with longevity risk	–244	–3	–22	–7

Germany's portfolio is mostly traditional participating business with long premium paying terms. Sensitivities to non-economic assumptions are relatively low because technical surplus is shared with policyholders.

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on embedded value than rising rates. Interest rate sensitivities in 2010 are in line with those of 2009. Volatility sensitivities moved broadly in line with the change in O&G from 2009 to 2010.

Value of new business is calculated using a marginal approach. The approach may lead to some counter intuitive sensitivities and distortions from one year to the next. New business guarantees are lower than inforce guarantees so that the addition of new business to the portfolio reduces the overall guarantee level, which can become more valuable in distressed scenarios applied in some sensitivities.

3.4 Europe

The embedded value of Europe increased from EUR 9,107mn to EUR 9,232mn. The increase was mainly driven by France, which offset the lower values in Italy and Greece, where the adjustment for illiquidity premium could not cover significant loss in value on government bonds. Other units in Belgium, Spain, Netherlands, Portugal and Turkey contributed EUR 123mn of additional value.

3.4.1 Development of Value of New Business

The value of new business written in Europe in 2010 was EUR 316mn, 16% higher than the value published in 2009. The new business margin changed from 2.1% to 2.2%. Exhibit 19 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 19)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	286	2.1	13,487
Change in Foreign Exchange	–	0.0	3
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	286	2.1	13,490
Change in volume	9	0.0	444
Change in business mix	10	0.1	5
Change in assumptions	–33	–0.3	221
Value of new business as at 31 December 2010 before adjustment	272	1.9	14,159
methodology adjustment effects	43	0.3	–
Value of new business as at 31 December 2010 after adjustment	316	2.2	14,159

Premium volumes increased across the board with the exception of Netherlands, where sales remained depressed after the adverse market sentiment around unit-linked products. Business mix could be improved by most units as sales were directed towards products with higher margins.

Economic assumptions reflecting the current low interest environment, led to a significant decrease in value especially in France and Italy. Mortality assumptions were updated in Spain to better reflect recent experience. Price increases and strict expense controls improved the value of new business in Turkey.

The methodology adjustment including illiquidity premium, yield-curve extrapolation and decreased cost-of-capital charge had the largest impact on Italy (EUR 23mn), France (EUR 11mn), Belgium (EUR 7mn) and Spain (2mn). The impact on the smaller portfolios of other countries was limited.

3.4.2 Development of Embedded Value and Free Surplus

The embedded value for Europe increased from EUR 9,107mn to EUR 9,232mn after a dividend payment of EUR 381mn. The analysis of earnings in Exhibit 20 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 20)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	2,152	3,269	3,687	9,107
Total opening adjustments	2	–	608	609
Foreign Exchange Variance	2	–	1	3
Acquired / Divested business	–	–	–	–
Adjustment effect of illiquidity premium	–	–	456	456
Adjustment effect of yield curve extrapolation	–	–	9	9
Adjustment effect of cost of capital charge	–	–	141	141
Adjusted Opening MCEV as at 31 December 2009	2,153	3,269	4,294	9,717
Value of new business at point of sale	–1	–	317	316
Expected existing business contribution				
reference rate	67	–	128	195
in excess of reference rate	13	–	247	260
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	695	–148	–547	–
on new business	–513	362	151	–
Experience variance	–74	55	20	1
Non-economic assumption changes	3	–3	130	130
Other operating variance	16	–21	193	188
Operating MCEV earnings	205	245	639	1,089
Economic variances	–585	483	–1,097	–1,199
Other non operating variance	7	–	–	7
Total MCEV earnings	–374	728	–457	–104
Closing adjustments				
Net capital movements	–381	–	–	–381
Closing MCEV as at 31 December 2010	1,399	3,997	3,837	9,232

Italy and France are large constituents of Europe. Details of their earnings are covered in the following sections.

The majority of the restatement impact of illiquidity premium comes from France (EUR 159mn), Italy (EUR 107mn), Belgium (EUR 93mn) and Spain (EUR 86mn). Yield-curve extrapolation was only applied in Spain and the decreased cost-of-capital charge mainly impacted France (EUR 66mn), Italy and Spain (EUR 30mn each).

Total MCEV earnings were negative, driven by adverse economic variances across the board. Positive earnings were reported by France, the Netherlands, Portugal and Turkey.

The most significant new business strain was incurred in France and Italy. Spain invested EUR 34mn and Belgium 19mn in new contracts.

Negative experience variances in France and Italy were compensated by Spain and Belgium, where mortality results exceeded expectations. The most significant assumption changes were reported by the Netherlands (EUR 63mn due to improved mortality expectations and expense reductions) and Spain (EUR 52mn due to mortality and lapse assumptions being adapted to most recent experience). The Netherlands incurred one-off costs of EUR 7mn.

Other operating variance mainly affected France. The Netherlands updated their asset model with an impact of EUR –47mn.

Apart from France and Italy, economic variances were highly negative in Spain (EUR –53mn), Belgium (EUR –79mn) and Greece (EUR –53mn), as interest rates declined in 2010. In Spain additional capital requirements contributed another EUR –184mn.

3.4.3 Sensitivities

Exhibit 21 shows the sensitivities for Europe's embedded value and value of new business:

Sensitivities (Exhibit 21)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	9,232	100	308	100
Required Capital equal to local solvency capital	84	1	3	1
EV change by economic factors				
Risk Free Rate –100bp	–474	–5	–62	–20
Risk Free Rate +100bp	235	3	10	3
Risk Free Rate –50bp	–195	–2	–23	–8
Risk Free Rate +50bp	141	2	7	2
Charge for CNHR +100bp	–118	–1	–8	–3
Equity and property values –10%	–456	–5	–6	–2
Swaption volatilities +25%	–139	–2	–8	–3
Equity option volatilities +25%	–140	–2	–7	–2
delta to CFO Forum peers	–187	–2	–5	–1
EV change by non-economic factors				
Lapse Rates –10%	150	2	24	8
Maintenance Expenses –10%	296	3	20	6
Mortality –5% for products with death risk	91	1	8	3
Mortality –5% for products with longevity risk	–47	–1	–	–

The impact from lower risk free rates was smaller than in 2009, mainly triggered by France. In most other countries it is higher, as interest rates decreased and moved closer to guarantees. Due to the asymmetric nature of embedded financial options and guarantees, falling market rates have a greater impact on embedded value than rising rates.

The inclusion of illiquidity premium and yield-curve extrapolation increased embedded value by 10%, for Spain this increase amounts to 91% due to the significant amount of long term pension business.

Sensitivities to non-economic factors are highest regarding expenses and lapse rates, while changes in mortality mainly affect entities with a substantial exposure in risk products (e.g. Portugal and Spain).

3.5 France

The embedded value of Allianz France increased from EUR 4,218mn to EUR 4,603mn or by 9% after a dividend payment of EUR 100mn. The unfavourable economic environment had a negative impact on the development of the embedded value.

3.5.1 Development of Value of New Business

The value of new business written in France in 2010 was EUR 107mn, 5% lower than the value published in 2009 due to the unfavourable economic environment despite the positive business mix and higher volumes. The new business margin changed from 1.9% to 1.7%. Exhibit 22 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 22)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	113	1.9	6,097
Change in Foreign Exchange	–	0.0	–
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	113	1.9	6,097
Change in volume	3	0.0	169
Change in business mix	6	0.1	–
Change in assumptions	–26	–0.4	–
Value of new business as at 31 December 2010 before adjustment	96	1.5	6,266
methodology adjustment effects	11	0.2	–
Value of new business as at 31 December 2010 after adjustment	107	1.7	6,266

Relative to 2009, premium volume increased by EUR 169mn or 3%, driven by the strong growth of individual lines of business. There was also a return in demand for unit-linked products leading to higher premium volumes.

The observed shift in business mix had a positive impact on new business margin and consequently increased the value of new business by EUR 6mn.

The negative impact of economic assumption changes was quite significant and was driven by the unfavourable market conditions, in particular the negative impact of decreased interest rates.

In line with our general methodology explained in Appendix A, the value of new business in France reflects the possibility to offset the new business strain against profit sharing requirements.

In 2010, France made the decision to attribute to the policyholder 100% of investment income earned from the business subject to minimum profit sharing in order to support current bonus rates and strengthen the unallocated liability buffer (PPE). For the same reason, France decided not to completely offset the new business strain against profit sharing, but to recognise a part of it in the value of new business.

3.5.2 Development of Embedded Value and Free Surplus

The embedded value of Allianz France increased from EUR 4,218mn to EUR 4,603mn or by 9% after a dividend payment of EUR 100mn.

The analysis of earnings in Exhibit 23 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 23)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	784	1,281	2,153	4,218
Total opening adjustments	–	–	225	225
Foreign Exchange Variance	–	–	–	–
Acquired / Divested business	–	–	–	–
Adjustment effect of illiquidity premium	–	–	159	159
Adjustment effect of yield curve extrapolation	–	–	–	–
Adjustment effect of cost of capital charge	–	–	66	66
Adjusted Opening MCEV as at 31 December 2009	784	1,281	2,378	4,443
Value of new business at point of sale	–	–	107	107
Expected existing business contribution				
reference rate	29	–	64	93
in excess of reference rate	–19	–	195	176
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	326	–80	–246	–
on new business	–212	172	40	–
Experience variance	–104	26	66	–11
Non-economic assumption changes	34	–34	48	48
Other operating variance	34	–41	264	256
Operating MCEV earnings	87	43	539	670
Economic variances	–381	325	–354	–409
Other non operating variance	–	–	–	–
Total MCEV earnings	–293	368	185	260
Closing adjustments				
Net capital movements	–100	–	–	–100
Closing MCEV as at 31 December 2010	390	1,650	2,563	4,603

MCEV earnings of Allianz France in 2010 were EUR 260mn.

Adjusted opening embedded value of 2010 increased embedded value by EUR 225mn or 5% due to methodology changes. The application of an illiquidity premium had an impact of EUR 159mn on embedded value. The base illiquidity premium was 59bps. 75% of the base illiquidity premium is applied when valuing traditional and other businesses. No illiquidity premium is applied when valuing unit-linked business although the – 10bps swap credit risk adjustment is applied. The decrease of cost-of-capital charge that reduced the cost of non-hedgeable risk and has a positive impact of EUR 66mn.

Earning the risk free investment return on the inforce portfolio increased embedded value by EUR 93mn, and expected returns in excess of risk free rates increased embedded value further by EUR 176mn.

Experience variances had a small negative impact of EUR 11mn which was mainly due to the deviation from crediting strategy. Assumption changes, in particular the positive effect from lowered expected expenses, increased embedded value further by EUR 48mn. Other operating variances reflect changes with respect to asset mix and the positive true-up effect due to the roll-forward of assets and liabilities to year-end 2010, thereby increasing the embedded value by EUR 256mn.

Economic variances had negative EUR 409mn impact reflecting the decrease of interest rates.

3.5.3 Sensitivities

Exhibit 24 shows the sensitivities for France's embedded value and value of new business:

Sensitivities (Exhibit 24)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	4,603	100	108	100
Required Capital equal to local solvency capital	–	–	–	–
EV change by economic factors				
Risk Free Rate – 100bp	–116	–3	11	10
Risk Free Rate +100bp	36	1	–12	–11
Risk Free Rate – 50bp	–42	–1	5	5
Risk Free Rate +50bp	30	1	–5	–5
Charge for CNHR +100bp	–48	–1	–3	–3
Equity and property values – 10%	–276	–6	–	–
Swaption volatilities +25%	–29	–1	–4	–3
Equity option volatilities +25%	–104	–2	–4	–4
delta to CFO Forum peers	–41	–1	–1	–1
EV change by non-economic factors				
Lapse Rates – 10%	85	2	8	8
Maintenance Expenses – 10%	205	4	8	8
Mortality – 5% for products with death risk	64	1	3	3
Mortality – 5% for products with longevity risk	–21	–	1	1

Sensitivities to economic assumptions eased from last year due to the methodology changes. As such, a fall in the risk free rate of 100bps reduces embedded value by EUR 116mn or 3%. An increase in interest rates by 100bps increases the embedded value by EUR 36mn or 1%.

France has a higher exposure to equity and property than most other countries and is therefore more sensitive to a drop in equity and property value. A drop by 10% reduces embedded value by 6%. Sensitivities to non-economic factors are low due to the ability to share the technical result with policyholders.

New business economic sensitivities with interest rate shocks are somewhat impacted by the marginal approach calculation, as explained for Germany Life.

3.6 Italy

The embedded value of Allianz Italy decreased from EUR 3,109mn to EUR 2,762mn after the positive restatement impact from liquidity premium and lower cost-of-capital charge. The change was mainly driven by interest rates movements and widened credit spreads between Italian government bonds and swap rates.

3.6.1 Development of Value of New Business

The value of new business written in Italy in 2010 was EUR 142mn, 14% higher than the value published in 2009. The new business margin changed from 2.2% to 2.4%. Exhibit 25 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 25)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	124	2.2	5,615
Change in Foreign Exchange	–	0.0	–
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	124	2.2	5,615
Change in volume	3	0.0	157
Change in business mix	1	0.0	–
Change in assumptions	–9	–0.2	153
Value of new business as at 31 December 2010 before adjustment	120	2.0	5,925
methodology adjustment effects	23	0.4	–
Value of new business as at 31 December 2010 after adjustment	142	2.4	5,925

On the like-for-like basis before the adjustment, the value of new business decreased by –4% to EUR 120mn and the new business margin dropped by 20bps to 2.0% compared to last year. This is mainly driven by the change in economic environment, which is partly offset by positive volume growth.

New business volumes increased, mainly driven by single premium unit-linked products in financial advisor channels. The sales mix shifted towards unit-linked business when compared to last year.

The positive volume effect is overridden by the large negative effect from assumption change due to the adverse economic environment. Falling swap rates and a significant increase in the spreads between swap rates and the Italian government rates affected the value of new business and caused the new business margin to decrease. Another minor negative effect was the increase in the mortality assumption for term insurance products.

The restatement of values for inclusion of an illiquidity premium and changed cost-of-capital charge for non-hedgeable risk, increased value of new business by 19% from EUR 120mn to EUR 142mn and increased new business margin by 40bps to 2.4%. The EIOPA yield-curve extrapolation did not affect Italian business as their liability durations are not longer than 30 years.

The MCEV methodology does not allow for the capitalization of the spreads on government bonds in the value of inforce or the value of new business. However, for asset liability matching purposes, Italy uses government bonds to back their relevant liabilities. If the spreads on Italian government bonds were taken into account, the additional value created would have increased the value of new business from EUR 142mn to EUR 150mn, 6% higher than the disclosed value.

3.6.2 Development of Embedded Value and Free Surplus

The embedded value for Allianz Italy decreased from EUR 3,109mn to EUR 2,762mn after a dividend payment of EUR –224mn.

The analysis of earnings in Exhibit 26 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 26)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	984	956	1,169	3,109
Total opening adjustments	–	–	138	138
Foreign Exchange Variance	–	–	–	–
Acquired / Divested business	–	–	–	–
Restatement impact of liquidity premium	–	–	107	107
Restatement impact of yield curve extension	–	–	–	–
Restatement impact of cost of capital charge	–	–	31	31
Adjusted Opening MCEV as at 31 December 2009	984	956	1,307	3,247
Value of new business at point of sale	–	–	142	142
Expected existing business contribution				
reference rate	20	–	29	50
in excess of reference rate	22	–	–	22
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	292	–63	–229	–
on new business	–208	130	78	–
Experience variance	4	25	–40	–11
Non-economic assumption changes	–11	11	–24	–24
Other operating variance	2	–	–	3
Operating MCEV earnings	122	103	–44	182
Economic variances	–30	–33	–379	–442
Other non operating variance	–	–	–	–
Total MCEV earnings	92	70	–423	–261
Net capital movements	–224	–	–	–224
Closing MCEV as at 31 December 2010	852	1,026	884	2,762

The inclusion of an illiquidity premium and lower cost-of-capital charge for non-hedgeable risk, increased market consistent embedded value by 4% from EUR 3,109mn to EUR 3,247mn. The EIOPA yield-curve extrapolation did not affect Italian business as their liability durations are not longer than 30 years. The base illiquidity premium used was 59bps. 75% of the base illiquidity premium is applied when valuing traditional and other businesses. No illiquidity premium is applied when valuing unit-linked business although the –10bps swap credit risk adjustment is applied.

The MCEV earnings were EUR –261 mn or –8% of the adjusted opening embedded value.

The economic variances were the main driver for the decrease of embedded value due to the adverse market environment change. The lower interest rates and the significantly widened spreads between swap rates and the Italian government bond rates as well as the increase in credit spreads on corporate bonds, negatively affected the embedded value.

The MCEV methodology does not allow for the capitalization of the spreads on government bonds in the value of in-force or the value of new business. However, for asset liability matching purposes, Italy uses government bonds to back their relevant liabilities. If the spreads on Italian government bonds were taken into account, the additional value created would have in-

creased the value of inforce from EUR 2,762mn to EUR 3,267mn, 18% higher than the closing embedded value.

Further negative effects were from experience variance and assumption changes which included a number of smaller effects. Experience variance included negative effects mainly from tax and lapse experience. The assumption change impacts were driven by higher mortality assumptions for term business and higher costs from higher capital for non-hedgeable risk, partly offset by a positive effect from renewal expense assumption changes.

3.6.3 Sensitivities

Exhibit 27 shows the sensitivities for Italy's embedded value and value of new business:

Sensitivities (Exhibit 27)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	2,762	100	143	100
Required Capital equal to local solvency capital	–	–	–	–
EV change by economic factors				
Risk Free Rate – 100bp	–161	–6	–53	–37
Risk Free Rate +100bp	83	3	12	8
Risk Free Rate – 50bp	–67	–2	–19	–13
Risk Free Rate +50bp	45	2	8	6
Charge for CNHR +100bp	–25	–1	–3	–2
Equity and property values – 10%	–109	–4	–4	–3
Swaption volatilities +25%	–81	–3	–4	–3
Equity option volatilities +25%	–7	–	–1	–1
delta to CFO Forum peers	–99	–4	–2	–1
EV change by non-economic factors				
Lapse Rates – 10%	24	1	8	6
Maintenance Expenses – 10%	34	1	5	3
Mortality – 5% for products with death risk	2	–	2	1
Mortality – 5% for products with longevity risk	–3	–	–	–

The economic sensitivities are slightly higher than last year due to the lower interest rate environment. In particular, the sensitivity with no illiquidity premium results in a 12% drop of embedded value because it effectively increases the spreads between swap rates and the Italian government rates which have a significant impact on the Italian portfolio.

The impacts from economic sensitivities on new business are relatively large because in the low interest rate environment, further decreases would lead to the interest rates being much closer to the minimum guarantee rates.

Non-economic sensitivities are low for Italy as the profits are mainly investment driven.

3.7 Growth Markets

The embedded value of the Growth Markets increased from EUR 1,589mn to EUR 1,804mn. The main driver of the increase in embedded value was the high value of new business, especially in Korea and Indonesia.

3.7.1 Development of Value of New Business

The value of new business written in the Growth Markets in 2010 was EUR 192mn, 45% higher than the value published in 2009. The new business margin changed from 2.8% to 2.4%. Exhibit 28 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 28)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	133	2.8	4,767
Change in Foreign Exchange	10	-0.1	509
Change in Allianz interest	-	0.0	-
Adjusted Opening Value as at 31 December 2009	143	2.7	5,276
Change in volume	56	0.0	2,056
Change in business mix	-16	-0.2	13
Change in assumptions	1	-0.2	515
Value of new business as at 31 December 2010 before adjustment	183	2.3	7,859
methodology adjustment effects	9	0.1	-
Value of new business as at 31 December 2010 after adjustment	192	2.4	7,859

Value of new business increased by EUR 10mn due to the weakening of the Euro against local currencies.

Strong increase in premium volumes in Asia, especially in Japan, Taiwan, Indonesia and Korea, increased value of new business.

However, as the higher volume in Taiwan was driven by top-up premiums at low margins, there was a negative effect on the overall new business margin analyzed in change of business mix.

A significant increase of new business margin was seen in Japan following the launch of more profitable products in 2010.

The change of lapse assumptions had a negative impact on the new business margin in Slovakia and Hungary, while other countries showed smaller positive effects.

There was a positive effect from the methodology adjustment, mainly the effect of the lower cost-of-capital charge in Korea and Indonesia.

3.7.2 Development of Embedded Value and Free Surplus

The embedded value for the Growth Markets increased from EUR 1,589mn to EUR 1,804mn after a dividend payment of EUR 13mn.

The analysis of earnings in Exhibit 29 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 29)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	-119	1,280	428	1,589
Total opening adjustments	-83	181	115	214
Foreign Exchange Variance	-83	181	-21	78
Acquired / Divested business	-	-	-	-
Adjustment effect of illiquidity premium	-	-	-2	-2
Adjustment effect of yield curve extrapolation	-	-	37	37
Adjustment effect of cost of capital charge	-	-	101	101
Adjusted Opening MCEV as at 31 December 2009	-202	1,462	543	1,803
Value of new business at point of sale	-30	-	223	192
Expected existing business contribution				
reference rate	33	-	56	89
in excess of reference rate	23	-	4	27
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	169	-26	-143	-
on new business	-233	111	122	-
Experience variance	-25	34	37	45
Non-economic assumption changes	-14	12	-95	-98
Other operating variance	-27	-56	-4	-87
Operating MCEV earnings	-105	74	199	168
Economic variances	10	184	-373	-178
Other non operating variance	-11	-	10	-1
Total MCEV earnings	-105	258	-164	-11
Net capital movements	13	-	-	13
Closing MCEV as at 31 December 2010	-295	1,720	379	1,804

The main drivers for the opening adjustments were the positive impact from a lower Euro against the Asian currencies and the positive effect from the lower cost-of-capital charge, mainly in Asia. The impact from the illiquidity premium was limited, as the small positive effect from Slovakia and Thailand was offset by the negative effect of Taiwan, driven by the negative embedded value. Taiwan did benefit from the new yield-curve extrapolation methodology.

There was a significant increase of the value of new business. High sales in Asia increased the value, especially in Korea and Indonesia.

With the high volumes of new business and the relatively small inforce portfolio, the new business strain

is higher than the profits released from the inforce, leading to a lower (more negative) free surplus.

Hungary incurred one-off costs of EUR 10mn.

The negative effect of assumption changes was mainly driven by Korea as a result of the update of the lapse assumptions.

The negative effect of the economic variances is mainly driven by the effect of the much lower interest rate in Korea.

Total MCEV earnings are slightly negative, as the operating earnings are offset by the economic variances in Korea.

Free surplus in the Growth Markets is negative, as Taiwan has a negative embedded value and also a negative free surplus as the required capital is higher than the available capital. The negative capital position is more than compensated by the overall positive capital position at group level.

3.7.3 Sensitivities

Exhibit 30 shows the sensitivities for the Growth Markets' embedded value and value of new business:

Sensitivities (Exhibit 30)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	1.804	100	188	100
Required Capital equal to local solvency capital	74	4	6	3
EV change by economic factors				
Risk Free Rate – 100bp	–619	–34	–15	–8
Risk Free Rate +100bp	371	21	9	5
Risk Free Rate – 50bp	–269	–15	–4	–2
Risk Free Rate +50bp	208	12	7	3
Charge for CNHR +100bp	–89	–5	–7	–4
Equity and property values – 10%	–30	–2	0	–
Swaption volatilities +25%	–67	–4	–3	–1
Equity option volatilities +25%	–19	–1	–1	–1
delta to CFO Forum peers	22	1	1	–
EV change by non-economic factors				
Lapse Rates – 10%	50	3	26	14
Maintenance Expenses – 10%	100	6	17	9
Mortality – 5% for products with death risk	72	4	9	5
Mortality – 5% for products with longevity risk	–14	–1	1	–

Sensitivities to interest rates is driven by the high guarantees in the old-block traditional portfolios in Korea and Taiwan. Due to the asymmetric nature of the embedded financial options and guarantees, falling market rates have a much higher impact on embedded value than rising rates.

The sensitivity to the illiquidity premium and yield-curve extrapolation is mostly driven by Taiwan, where the duration of the liabilities is very long and the impact of the yield-curve extrapolation is significant.

The new business sensitivity to lapse rates is mostly driven by Korea. The corresponding inforce lapse sensitivity is lower, due to offsetting effects between old business where guarantees are in the money and new business with lower guarantees.

Sensitivities for New Europe are low. Liabilities are well matched and backed by government bonds and equity exposure is limited, resulting in low economic sensitivities and option and guarantee values.

3.8 USA

The embedded value of Allianz Life USA increased from EUR 2,749mn to EUR 4,427mn. The main positive driver was the increase in the realisation of expected corporate spreads with a smaller, negative impact from economic variances as a result of the lower interest rate environment.

3.8.1 Development of Value of New Business

The value of new business written in the USA in 2010 was EUR 158mn, EUR 268mn higher than the value published in 2009. The new business margin changed from –1.8% to 2.0%. Exhibit 31 presents an analysis of the change in value of new business.

Development of Value of New Business (Exhibit 31)

	Value of New Business EUR mn	New Business Margin %	Present Value of NB Premium EUR mn
Reported Value as at 31 December 2009	– 110	– 1.8	6,111
Change in Foreign Exchange	– 8	0.0	425
Change in Allianz interest	–	0.0	–
Adjusted Opening Value as at 31 December 2009	– 117	– 1.8	6,535
Change in volume	– 26	0.0	1,459
Change in business mix	155	1.9	– 120
Change in assumptions	83	1.0	117
Value of new business as at 31 December 2010 before adjustment	94	1.2	7,991
methodology adjustment effects	63	0.8	–
Value of new business as at 31 December 2010 after adjustment	158	2.0	7,991

The US Dollar movements had a EUR – 8mn impact on the value of new business.

Volumes were higher than in 2009, with strong growth seen across the major product lines.

Changes in business mix can be attributed to two factors. Business mix shifted between fixed and fixed indexed annuity and variable annuity, resulting in an increase in the new business margin. New high margin variable annuity sales rebounded after suspension of low margin products in 2009. Fixed annuity business increased due to continued strong product demand and product actions taken in the year.

Changes in assumptions had a positive impact of EUR 83mn, primarily due to changes in the interest rate environment, mostly impacting business sold in the last quarter of the year. Additional impacts were due to updates to non-economic assumptions and changes in the acquisition expense overruns.

Methodology adjustments increased the value of new business by EUR 63mn and the new business margin by 80bps. The decreased cost-of-capital charge had an impact of 5bps on the new business margin and EUR 3mn on the value of new business, while the addition of illiquidity premium increased the value of new business by EUR 60mn and the new business margin by 70bps, nearly all of the change coming through the fixed annuity lines. No illiquidity premium is applied for variable annuity business. The EIOPA yield-curve extrapolation did not affect the US business as their liability durations are not longer than 30 years.

3.8.2 Development of Embedded Value and Free Surplus

The embedded value of Allianz Life USA increased from a published 2009 value of EUR 2,749mn to EUR 4,427mn after a dividend payment of EUR 31mn.

The analysis of earnings in Exhibit 32 presents the drivers of the change in embedded value.

Analysis of Earnings of Embedded Value (Exhibit 32)

	Earnings on MCEV analysis			
	Free Surplus EUR mn	Required Capital EUR mn	VIF EUR mn	MCEV EUR mn
Opening MCEV reported as at 31 December 2009	422	2,365	-38	2,749
Total opening adjustments	29	164	441	634
Foreign Exchange Variance	29	164	-3	191
Acquired / Divested business	-	-	-	-
Adjustment effect of illiquidity premium	-	-	396	396
Adjustment effect of yield curve extrapolation	-	-	-	-
Adjustment effect of cost of capital charge	-	-	48	48
Adjusted Opening MCEV as at 31 December 2009	451	2,529	403	3,383
Value of new business at point of sale	-	-	158	158
Expected existing business contribution				
reference rate	24	-	111	135
in excess of reference rate	1,178	-	117	1,296
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	3	-134	131	-
on new business	-485	354	131	-
Experience variance	40	-	37	77
Non-economic assumption changes	-	-	-53	-53
Other operating variance	-71	-	102	31
Operating MCEV earnings	689	220	734	1,643
Economic variances	-674	470	-364	-568
Other non operating variance	-	-	-	-
Total MCEV earnings	15	690	369	1,074
Net capital movements	-31	-	-	-31
Closing MCEV as at 31 December 2010	435	3,220	772	4,427

The US Dollar strengthened against the Euro by 6%, and this increase had a EUR 191mn impact on the embedded value.

The application of an illiquidity premium impacted embedded value by EUR 396mn. The base illiquidity premium used was 64bps. 75% of the base illiquidity premium is applied when valuing traditional and other businesses, including the fixed and fixed indexed annuities. No illiquidity premium is applied when valuing unit-linked business, including variable annuities.

The EIOPA yield-curve extrapolation did not affect the US business as their liability durations are not longer than 30 years.

The impact from the decreased cost-of-capital charge was EUR 48mn.

Value of new business at point of sale impacted embedded value by EUR 158mn.

Expected existing business contribution impacted embedded value by EUR 1,431mn. EUR 135mn resulted from the risk neutral unwind while EUR 1,296mn resulted from the returns in excess of the risk neutral, mainly the realisation of expected corporate spreads over the year.

Operating variances and assumptions changes were EUR 55mn, including one – off costs of EUR – 19mn.

Economic variances of EUR – 568mn were driven by lower swap rates that increased the likelihood of guarantees being paid. This was offset by improved equity markets and narrowing credit spreads.

3.8.3 Sensitivities

Exhibit 33 shows the sensitivities for Allianz Life US embedded value and value of new business:

Sensitivities (Exhibit 33)

	Inforce MCEV		New Business NB	
	EUR mn	%	EUR mn	%
Central Assumptions	4,427	100	170	100
Required Capital equal to local solvency capital	151	3	22	13
EV change by economic factors				
Risk Free Rate – 100bp	–57	–1	–20	–12
Risk Free Rate +100bp	–81	–2	3	1
Risk Free Rate – 50bp	27	1	–6	–3
Risk Free Rate +50bp	–28	–1	2	1
Charge for CNHR +100bp	–36	–1	–3	–2
Equity and property values – 10%	–39	–1	–15	–9
Swaption volatilities +25%	–174	–4	–5	–3
Equity option volatilities +25%	–324	–7	–21	–12
delta to CFO Forum peers	95	2	8	5
EV change by non-economic factors				
Lapse Rates – 10%	–26	–1	9	5
Maintenance Expenses – 10%	81	2	8	5
Mortality – 5% for products with death risk	15	0	2	1
Mortality – 5% for products with longevity risk	–31	–1	–1	–1

Compared to 2009, inforce and new business sensitivities to interest rates have decreased significantly due to higher rate environment with the application of an illiquidity premium and the narrowing of credit spreads. For inforce only the – 50bps sensitivity shows a positive impact. With the lessening of the spread compression, the change in discounting rates become the dominating factor, thus discounting at a higher rate results in a reduction of the value.

The sensitivity of inforce O&G to equity volatility has nearly doubled from 2009, mostly on the variable annuities due to changes in the volatility used and to the increase in the Q&G in the year.

3.9 Holding

The holding segment in the MCEV report contains the results from internal reinsurance as well as the holding expense adjustment. The following table summarizes the impact of these adjustments:

Summary Holding (Exhibit 34)

	Impact of Holding Expense EUR mn	Reinsurance EUR mn	Total EUR mn
Ending Embedded Value 2009	-409	159	-250
Ending Embedded Value 2010	-499	121	-378
Value of New Business 2009	-80	7	-73
Value of New Business 2010	-99	23	-76

The after-tax impact of higher holding expenses resulted in a decrease in the embedded value and value of new business.

As the entities calculate embedded value net of internal and external reinsurance, the corresponding projected profits of the internal life reinsurance entity increase the embedded value. Premiums are reported gross of reinsurance. Embedded value increased, driven by the value of new business and the unwinding of the discount rate and risk capital. Value of new business from reinsurance increased mainly as a result of the reinsurance of Japanese variable annuities.

4 Independent Opinion

Towers Watson has reviewed the methodology and assumptions used to determine the 2010 embedded value results for the Allianz Group, together with the disclosure provided in this document, against the requirements of the European Insurance CFO Forum Market Consistent Embedded Value Principles (“MCEV Principles”) ¹. Our review covered the embedded value as at 31 December 2010, the value of 2010 new business, the analysis of movement of embedded value over 2010 and the sensitivities on the embedded value and value of new business.

Towers Watson has concluded that the methodology and assumptions used by Allianz Group, together with the disclosure provided in this document, comply with the requirements of the MCEV Principles subject to the following limitations:

- The inclusion of a liquidity premium for participating business (as permitted by Principle 14) leads to non-compliance with the requirements of Principles 7 and 12 that projected cash flows are valued in line with the prices of similar cash flows that are traded in the capital markets, as described in Appendix B1 of this disclosure document;
- Allianz’s disclosed interpretation of Principle 14 and G14.2 that swap curves at longer durations do not provide a robust basis for setting the reference rate and that the extrapolation approach as described in Appendix B.1 of this disclosure document is a more appropriate alternative.

Towers Watson has also performed limited high-level checks on the results of the calculations and has confirmed that any issues discovered do not have a material impact on the disclosed 2010 embedded value, value of new business, analyses of movement of embedded value and sensitivities. Towers Watson has not, however, performed detailed checks on the models and processes involved.

In arriving at these conclusions, Towers Watson has relied on data and information provided by Allianz SE and its subsidiaries. This opinion is made solely to Allianz SE in accordance with the terms of Towers Watson’s engagement letter. To the fullest extent permitted by applicable law, Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than Allianz SE for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.

A Appendix: Methodology Update

For the reporting cycle 2010 Allianz introduced three changes in methodology and assumption setting to achieve greater consistency with European peers. These changes were implemented in line with guidance issued by the CFO and CRO Forums and EIOPA for Solvency II as given during 2010. The changes are:

- Introduction of illiquidity premium, see Appendix B.1 Economic Assumptions
- Yield curve extrapolation, see Appendix B.1 Economic Assumptions
- Alignment of Cost-of-capital charge with European peers, see Appendix A.4.3 Cost of Residual Non-Hedgeable Risk and B.2 Capital charge for CNHR.

A Appendix: Methodology

Allianz Group provides the operating entities with detailed guidelines in order to ensure consistency of embedded value calculations throughout the Group. Allianz Group sets the economic assumptions centrally which are then used in the calculations by the operating entities. All results submitted to Allianz Group are signed off by the local chief actuary and the local CFO.

A.1 Definitions

According to MCEV Principle 3, MCEV is defined as 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. It is calculated on an after-tax basis taking into account current legislation and known future changes.

The EV can be broken down into the net asset value, i.e. the value of the assets not backing liabilities, and the value of inforce, i.e. the value of future profits emerging from operations and assets backing liabilities.

The net asset value (NAV) contains

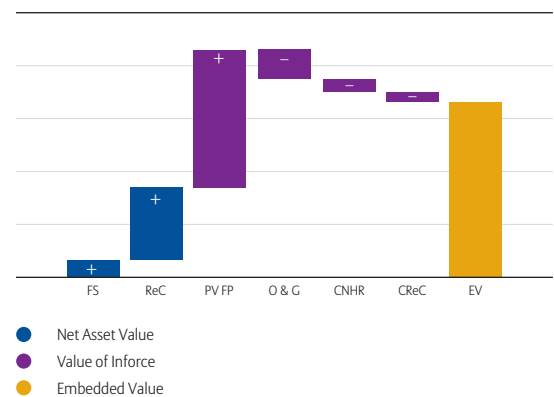
- the required capital (ReC), i.e. the amount of capital necessary to run the business
- and the free surplus allocated to the covered business (FS).

The value of inforce covered business (VIF) is defined as

- the present value of future profits from inforce business (PVFP)

after allowance for

- the time value of financial options and guarantees (O&G),
- the cost of residual non-hedgeable risks (CNHR),
- the frictional cost of required capital (CReC).



A.2 Net asset value

Net asset value ("NAV") is the market value of the assets not backing local statutory reserves at 31 December 2010, net of an allowance for tax on unrealized capital gains. The NAV includes the required capital ("ReC"), i.e. the amount of capital required to support inforce business in excess of local statutory reserves, and the free surplus ("FS"), i.e. the market value of any capital allocated to, but not required to support, the inforce business at the valuation date.

A.3 Required Capital

According to the MCEV Principles the ReC is the amount of capital required to be held to support covered business in excess of local statutory reserves, taking into account external requirements such as solvency requirements as well as capital required to meet internal objectives. In Allianz, the required capital is defined as the maximum of the local minimum statutory solvency capital, the capital requirement derived from the internal risk capital model and additional capital to reflect market standards (see also chapter 3.1).

The internal risk capital in Allianz Group is defined as the maximum loss in terms of Market Consistent Embedded Value (MCEV) that shareholders may experience under adverse conditions over a time horizon of one year with a confidence interval of 99.93% reflecting the Group's target rating of AA. In other words, Risk Capital is held to protect against insolvency from the point of view of the economic balance sheet during the time horizon of one year. The time horizon has been chosen to be one year as it is assumed to take up to one year to transfer liabilities to a third party.

For the quantification of internal risk capital for life insurance operations, in a first step the risk universe is broken down into the categories market risk, credit risk, actuarial risks and business risks. These are further decomposed into single risk drivers and sub risk drivers; e.g. for mortality, level, trend and calamity risks are assessed separately. For each risk driver a stand-alone capital is defined based on the change in MCEV under worst case shock conditions of the corresponding risk driver.

Internal risk capital is calculated on a fund level, where "fund" refers to a subset of assets and related liabilities that are managed together, forming the basis for a common profit sharing mechanism and thus forming a key element of risk mitigation. In order to derive risk capital requirements on a fund level, stand-alone risk capital requirements per risk driver are aggregated in a first step to risk capital as per risk category and are further aggregated to a fund level. Diversification between non-financial risk types and

between covered entities within MCEV scope is allowed for. Diversification does not include effects between financial and non-financial risk types and between covered and non-covered entities.

As described, Allianz internal risk capital for Life entities is based on the change in MCEV, and for P/C on a comparable change in economic value. Therefore the available economic capital to be considered to cover the capital requirement of the entity is the MCEV, which can be split into the VIF, i.e. the profit margin in the statutory reserves and the MCEV NAV. This means that to protect against insolvency from an economic point of view, capital may be required to be held in addition to local statutory reserves and statutory solvency capital up to risk capital, in case the available capital including margins in reserves is not sufficient to cover risk capital.

Generally, the economic capital requirement is monitored and met for each entity, however in exceptional situations, individual companies may not be fully capitalized beyond local solvency levels. This means that risk capital requirements may be higher than MCEV on a local level, or equivalently required capital may be higher than MCEV NAV, as long as targets are met at Group level. Nevertheless the local entities will have to reflect the full required capital (including the economic view) and calculate the cost of required capital accordingly.

A.4 Value of Inforce covered business

The value of inforce covered business is defined as the present value of future profits from inforce covered business (PVFP) after allowance for the value of financial options and guarantees (O&G), for the cost of residual non-hedgeable risk (CNHR) and for the frictional cost of required capital (CReC). These terms are defined in the following sections.

A.4.1 Present value of future profits

The PVFP is the discounted present value of the projected future emergence of shareholders' statutory profits, based on projected cash flows resulting from the current inforce portfolio.

Within the market consistent approach, each cash flow is valued using the discount rate consistent with that applied to such a cash flow in the capital markets. For example, an equity cash flow is valued using an equity risk discount rate, and a bond cash flow is valued using a bond risk discount rate.

Where cash flows are either independent of or move linearly with market movements, an equivalent and more practical method, known as the 'certainty equivalent' approach, can be applied, whereby it is assumed that all assets earn the risk-free rate and all cash flows are discounted using the risk-free rate. This leads to the same result as the method described in the previous paragraph.

The PVFP includes any intrinsic value of the embedded financial options and guarantees. Additional costs of O&G related to the variability of investment returns (the time value) are shown separately as described in the following section.

A.4.2 Time value of options and guarantees

A market consistent approach has been adopted for the valuation of material financial options and guarantees, using a stochastic option pricing technique calibrated to be consistent with the market price of relevant traded options.

The most material options and guarantees granted by the Allianz Group companies are:

- Guaranteed interest rates and minimum maturity values
- Guaranteed minimum surrender values
- Annuity conversion options
- Extension options
- Options and guarantees for unit-linked contracts and variable life and annuities
- Fund switching options with guarantee

The time value of these options and guarantees is determined based on stochastic techniques. Due to their complex nature, for the majority of the business there is no closed form solution to determine the value. Therefore stochastic simulations are applied which project all cash-flows and reserves including

expenses, taxes etc. under a significant number of economic scenarios to determine a stochastic PVFP. The time value of O&G is then calculated as the difference between the certainty equivalent and the stochastic PVFP.

The models and assumptions employed in the stochastic simulation are consistent with the underlying embedded value and allow for the effect of management actions and policyholder behavior in different economic scenarios. The scenarios and the key parameters used in the calculations of O&G are described in Appendix B.1.

Allianz has developed a central asset-liability interaction tool which is used by all entities for the stochastic simulations for options and guarantees and also for the calculation of risk capital. An important part of this tool is the modeling of investment management and crediting strategies:

The main components of the investment strategies are the definition of a target asset allocation, definition of buying and selling rules for the rebalancing process and the definition of asset profiles for reinvestments. While in the standard model the target allocation is defined upfront for each fund and time step, some subsidiaries have refined the implemented strategy to include simple dynamic rules based on stress tests that are prescribed by local authorities. The target allocation is normally consistent with the current asset mix. Projected changes to the asset mix can only be considered to the extent that they have already been agreed in business plans and have been at least partly achieved by the end of the reporting period. Such changes are only considered to the extent that they are projected to be realized within the first three projection years.

The modeled crediting strategy considers all regulatory and contractual rules. Within these boundaries it is recognized that management behavior is driven by both shareholders' and policyholders' expectations given the economic environment in each scenario. The usage of buffers such as unrealized capital gains or participation funds to meet certain return targets for policyholders and shareholders is defined in the

strategy. Where there is management discretion with regard to different types of profit sharing, as for example between terminal dividends versus cash or bonus crediting, a corresponding strategy is defined.

Implemented management strategies follow a strict governance procedure. All specific enhancements and significant parameters are signed off by both local management and Allianz Group. It needs to be demonstrated that the modeled strategies reflect observed management behavior and that any legal and contractual rules are considered as well as potential external drivers such as market pressure. Modeling simplifications are evaluated.

The valuation of guaranteed surrender, extension and conversion options requires modeling of dynamic policyholder behavior dependent on the movement of financial markets. Unlike options on traded assets, however, it is not possible to evaluate these options assuming fully rational policyholder behavior. Contractual features such as surrender penalties, terminal dividends or riders have an impact on the behavior just as the fact that certain embedded features in life contracts cannot be acquired elsewhere. Most Allianz subsidiaries model dynamic behavior as a function of the spread between the credited rates and a market benchmark return. The best estimate assumptions are only altered when the spread exceeds certain boundaries and the dynamic change of the best estimate rates is generally limited. The corresponding parameters vary by product and client group.

A.4.3 Cost of residual non-hedgeable risk

MCEV Principle 9 requires explicitly an allowance for all non-hedgeable risk which are not already allowed for in the time value of options and guarantees or in the deterministic PVFP. In addition to the hedgeable financial risk captured in the time value or options and guarantees, allowance needs to be made for non-financial risks, for non-hedgeable financial risk and for operational risk, where both symmetric and asymmetric risk needs to be considered.

Allianz captures non-financial and operational risk within the cost of residual non-hedgeable risk (CNHR). Allianz applies a cost of capital approach, i.e.

the allowance is calculated based on the cost of holding capital for non-financial and operational risk. The risk capital is based on the internal risk capital model and equal to the stand alone risk capital for mortality risk, lapse risk, expense risk and operational risk. It is based on a 99.93% percentile as required by Allianz target rating of AA for our internal model, to which we apply a capital charge of 3.25% (see Appendix B.2). Assuming a 99.5% percentile, this would correspond to a cost of capital charge of 4%. This latter choice was agreed by European peers as a compromise to overcome the variety in capital charges throughout the industry.

Non-financial risk capital is allowing for an average diversification of covered risks. This covers diversification between non-financial risk types and between covered entities within MCEV scope. Diversification does not include effects between financial and non-financial risk types and between covered and non-covered entities. The capital is projected over the life time of the portfolio based on the projected reserve and other relevant drivers such as sum at risk. The same drivers are used to split the total capital for non-financial risk between existing business and new business. The charge applied to the projected capital reflects the cost of funds for the Group (see Appendix B.2). To ensure compliance with MCEV Principles, we have assessed separately the cost of asymmetries in non-financial risk, the cost of non-hedgeable financial risk (see next paragraph) and the cost of operational risk which are not included yet in the PVFP or in the options and guarantees. This analysis showed that a major part of our cost of residual non-hedgeable risk is actually an allowance for uncertainty and symmetric risk, with the balance of the CNHR relating to the required allowance for asymmetric non-financial risk, non-hedgeable financial risk and operational risk.

Financial non-hedgeable risk exists in markets which are not sufficiently deep and liquid, e.g. where swaps are not available for all durations and only shorter than projected liabilities and yield curve extrapolation is needed as requested by EIOPA for Solvency II and as introduced to Allianz MCEV methodology for 2010, see Appendix B1. To assess the non-hedgeable financial risk related to extrapolation, we started with a

cost of capital approach for the full interest rate risk of the portfolio, and estimated that part resulting only from projection years later than the entry point of extrapolation. This estimation showed an amount of approx EUR 200mn for the cost of non-hedgeable risk for yield curve extrapolation. This amount was fully covered in our overall allowance for cost of residual non-hedgeable risk from above, so it was not needed to introduce a separate allowance for the risk related to extrapolation.

A.4.4 Frictional Cost of Required Capital

The cost of holding required capital is the difference between the amount of required capital and the present value of future releases, allowing for future investment returns of that capital. It reflects the impact on the value for the shareholder due to the fact that the capital is locked in the company to run the business.

The cost of holding the ReC consist of the projected tax to be paid on interest earned from assets backing the required capital in each projection year and the cost of investment management of these assets, where these have not already been allowed for in the PVFP.

Where investment income on assets backing required capital is subject to profit participation with policyholders, this leads to an additional source of frictional cost of required capital. For Allianz this applies only to the German Health business.

Where capital is derived from the internal risk capital model the capital is projected over the life time of the portfolio based on the projected reserve and other relevant drivers such as sum at risk. The same drivers are used to split the total required capital between inforce and new business.

A.5 New Business

New business is comprised of individual and group policies sold during the reporting period including the expected renewals and expected future contractual alterations to those contracts. Recurring single premiums written under the same contract are included in the value of the contract where future single premiums and their level are reasonably predictable. Additional or ad-hoc single premiums that are paid into existing policies are treated as new business in the year of payment. Short-term group risk contracts are projected with allowance for renewal rates in line with observed experience.

The value of new business (VNB) is defined as the value added to the value of inforce by the new policies. It is calculated as the present value of future after tax profits (PVFP) minus the time value of options and guarantees (O&G) minus the cost of residual non-hedgeable risk (CNHR) minus the cost of holding the required capital (CReC).

The values are point of sale values. To better reflect point of sale assumptions in 2010 Allianz changed its approach to value the new business based on interest rates valid at the beginning of the quarter the business was sold in line with our quarterly disclosure of value of new business. Appendix B.1 shows the corresponding economic assumptions. For our US business, where products are repriced more frequently, we apply a bi-weekly update of economic assumptions for new business calculations to better reflect how the business is managed.

Timing and assumptions for the present value of new business premiums are in line with assumptions used for the value of new business.

As described in our 2008 disclosure document, in December 2008 the CFO Forum concluded that the market environment at the end of 2008 displayed highly unusual characteristics which reflected wide spread concern in the market about liquidity and triggered unusual activities. The CFO Forum therefore agreed that companies calculating MCEV may adhere to principle 15.3 and apply average volatilities or volatilities taken from a different date than the valuation date as a more adequate basis for the valuation of long term business in the books.

The same assumptions have been applied for new business values in the first three quarters in 2010. In the 4th quarter we unlocked the volatility assumptions and now again apply volatilities as of valuation date (see Appendix B.1).

Expense allowances takes into account all acquisition expenses, including any overrun.

For a major part of the business the value added by new business is equal to the stand-alone value calculated for the business written in the year. Investment return assumptions are based on the market assumptions described in Appendix B.1. For open fund products, where new policies and existing policies are managed together in one fund, the stand-alone value is adjusted for certain interaction effects between new business and inforce business. In Germany and France for example due to regulatory profit sharing rules initial expenses can be shared with all policyholders of the inforce fund, so the shareholder strain from new business is reduced significantly. Furthermore, in order to capture the impact on the time value of options and guarantees from the interaction between new business and previously written business, open fund products are valued on a marginal basis as the difference between the O&G value calculated with and without new business.

A.6 Participating business

The profit sharing assumptions take into account contractual and regulatory requirements, management strategy and the reasonable expectations of policyholders.

For companies with significant unrealized gains or profit-sharing reserves, the crediting strategies may include a distribution of these buffers to policyholders and shareholders as the business runs off, consistent with established company practice and local market practice and regulation. Alternatively, these buffers may not be required in many of the scenarios to pay competitive bonus rates and there will be excess assets at the end of the projection. In the latter case, the excess assets at the end of the projection are shared between policyholders and shareholders in a consistent manner and the discounted value of the shareholders' share is included in the inforce value.

A.7 Health business

The MCEV methodology for the German Health business is aligned to the methodology used for the Life entities. In addition certain specifics to health have been taken into consideration.

- An annual inflation of health cost is assumed which triggers premium adjustments on a regular basis.
- Any adjustment to the technical interest rates is determined in line with regulatory requirements
- The company's strategy to limit premium increases on inforce policies is applied.
- The time value of financial options and guarantees reported is zero as the technical interest rate used for reserving is not a minimum guarantee and can be adjusted in line with regulatory requirements. In addition, we have assessed that the ability to adjust premiums with respect to changes in economic factors is sufficient to fully cover the financial guarantees.
- Investment income on assets backing required capital is subject to profit participation, which leads to an additional source of frictional cost of required capital. This leads to a two thirds reduction in the shareholder value of required capital after frictional cost.

A.8 Look through adjustments

Under the MCEV Guidance, profits or losses in subsidiary companies providing administration, investment management, sales and other services related to managing the covered business should be included on a "look through" basis in the total MCEV profits.

The expenses incurred in service companies are directly deducted from the PVFP. As the majority of the related contracts are at cost, no further look-through adjustments are required for these arrangements.

There are, however, some arrangements with respect to the covered business where profits arise in service companies and the asset management segment, which have not been included in the MCEV calculations.

The total value of look-through adjustments on an MCEV basis is approximately EUR 625mn as at 31 December 2010. This additional value has not been included in the MCEV figures.

B Appendix: Assumptions

B.1 Economic assumptions

The embedded value results for 2010 are based on economic market conditions as of 31 December 2010.

Options and guarantees have been evaluated using market consistent scenarios. These have been generated to be arbitrage free, and the model underlying the scenarios has been calibrated to replicate actual market implied volatilities for selected financial instruments at the valuation date. This calibration is provided by Barrie & Hibbert, a UK based financial consulting company. Stochastic economic scenarios are then generated centrally by an application also provided by Barrie & Hibbert.

Key economic assumptions for risk neutral evaluation are for every economy

- the reference yield curve,
- the implied volatilities for each asset class,
- correlations between different asset classes and economies.

Market data for interest rates have been taken from an internal data base fed by Reuters data; market data used for calibration of volatilities has been taken from Reuters and Bloomberg where available and sufficiently liquid. Correlations and volatilities for real estate are based on historical data.

Reference yield curves used in the certainty equivalent approach and the stochastic scenarios are based on swap rates as at 31 December 2010 with the following further steps.

In line with EIOPA guidance for Solvency II a reduction of swap rates by 10bps is made to account for credit risk inherent in swaps. The guidance is based on the proposal made by the CFO Forum and CRO Forum in chapter 3 of their document “QIS 5 Technical Specification – Risk free interest rates”.

In 2010 Allianz changed its embedded value assumptions to include an illiquidity premium. This is in line with the October 2009 MCEV Principle 14, which reads “Where the liabilities are not liquid the reference rate should be the swap yield curve with the inclusion of a liquidity premium, where appropriate.”

The maximum allowable illiquidity premium amount for main currencies is determined by applying the 50/40 proxy formula $\text{Maximum}(0; 50\% * (\text{corporate spread over swap} - 40\text{bps}))$, where the corporate spread over swap is measured with appropriate market indices for each economy. For the corporate spread over swap for the two currencies EUR and USD, we use the quotation directly from Markit¹ for the spread over swap (“direct approach”) instead of approximating it in two steps, the first for the corporate spread over government bond rates and the second for the swap over government rates (“direct approach”). The latter would be the approach used for QIS 5, however, we observed distortions from different government bond baskets in the two steps which increased during 2010 with increasing government bond spreads in some countries, and thus, consider the first approach as more appropriate. Our approach is in line with analysis of the “risk free rate working group” of the CFO and CRO Forum. For other currencies CHF, CZK, PLN, HUF, THB and MYR we assumed similarly illiquidity premiums in line with the EIOPA guidance for QIS 5.

We applied the illiquidity premium in line with EIOPA guidance which is up to 15 years for EUR and 30 years for USD. Following these points, the illiquidity premium runs linearly down to zero in the following five years. However, in case these points coincide with the entry point of the extrapolation, the illiquidity premium does not run down to zero. This is true for CZK and PLN at 15 years and USD at 30 years respectively. The illiquidity premium does not run down completely because it is added to the forward curve rather than swap curve. Please note that amounts shown for illiquidity premiums (see Table 2 below) are relative to swaps rates. When measured against the swap credit risk adjusted swap curve, the base illiquidity premium would be 10bps higher.

¹ Referred to as “Index Spread to Libor Curve” in the Markit definition

For application to products we apply a simplified bucketing approach. We apply no illiquidity premium to unit-linked and variable annuities and 75% of the illiquidity premium to all participating and other businesses, including US fixed and fixed indexed annuities.

We have ensured that the predictability of the liability cashflows and the assets backing the liabilities justify the level of the illiquidity premium assumptions applied.

As in previous years, for Korea reference rates are based on government rates as due to systematic distortions in the Korean swap versus the Korean government bond market. No illiquidity premium is applied for KRW.

As some of our liabilities are running longer than asset durations are available on financial markets in sufficient depth and liquidity, an extrapolation of yields is needed to assess swap maturities beyond this horizon. We consider markets as deep and liquid up to terms where the majority of government and corporate bonds exist, which can be assessed as 30 years for EUR which is that used as the extrapolation entry point.

For 2010 Allianz adjusted the approach for extrapolation to the approach prescribed by EIOPA for QIS 5. This means that yield-curve extrapolation is done with a Smith Wilson approach along the forward curve with an ultimate forward rate and an entry point of extrapolations as prescribed, i.e. an ultimate forward rate of 4.2% and an entry point to extrapolation of 30 years for EUR, USD and all other currencies except the CHF and JPY. The ultimate forward for the CHF and JPY was 3.2%.

Please note that for consistency yield-curve extrapolation is applied in sensitivities to interest rate shifts. This means that only the deep and liquid part of yield curve is shifted in a fully parallel way with the ultimate forward rate being kept stable. Extrapolation parameters determine the actual shift of the extrapolated part of yield curve, which is then a non-parallel shift.

Please note that due to the introduction of new underlying reference rate methodology as described above, the projected cash flows may not always be valued in line with the market prices of similar financial instruments that are traded on the capital markets, which is required by the MCEV Principles. Please note that we applied consistent reference rate assumptions to both the deterministic and stochastic runs, so the intrinsic and time value of O&G's is correct. This would not be feasible if the stochastic scenarios used to value O&G's were based on swap curves and calibrated to meet market prices while the deterministic runs used the reference rate that incorporated the new methodology.

For currencies where swap markets are not sufficiently deep and liquid, government rates are used as is the case in China, Indonesia, Malaysia, Croatia, and Romania. The embedded value of these entities is less than 1% of the total embedded value.

Table 1 shows the swap rates used in the market consistent valuation:

Swap rates (Table 1)

Currency	as of dd.mm.yyyy	1 year %	2 year %	5 year %	10 year %	20 year %
EUR	31.12.2009	1.05	1.81	2.82	3.69	4.23
	31.03.2010	0.85	1.45	2.42	3.37	3.97
	30.06.2010	0.95	1.34	2.08	2.96	3.50
	30.09.2010	1.10	1.44	1.95	2.60	3.06
	31.12.2010	1.14	1.59	2.52	3.40	3.86
CHF	31.12.2009	0.36	0.84	1.70	2.55	3.08
	31.03.2010	0.38	0.80	1.57	2.36	2.77
	30.06.2010	0.24	0.53	1.24	1.97	2.26
	30.09.2010	0.24	0.50	1.14	1.80	2.03
	31.12.2010	0.22	0.52	1.40	2.18	2.55
USD	31.12.2009	0.63	1.38	3.01	4.12	4.74
	31.03.2010	0.56	1.19	2.78	4.00	4.71
	30.06.2010	0.71	0.97	2.09	3.16	3.85
	30.09.2010	0.40	0.61	1.50	2.63	3.36
	31.12.2010	0.46	0.84	2.25	3.63	4.36
KRW	31.12.2009	2.44	3.67	4.81	5.41	5.79
	31.03.2010	2.22	3.32	4.55	5.15	5.38
	30.06.2010	1.70	3.27	4.33	4.88	5.37
	30.09.2010	2.22	2.90	3.79	4.32	4.63
	31.12.2010	2.51	2.92	4.05	4.63	4.92
CZK	31.12.2009	2.14	2.24	3.03	3.62	4.11
	31.03.2010	1.96	1.94	2.85	3.47	3.97
	30.06.2010	1.78	1.63	2.25	2.84	3.23
	30.09.2010	1.81	1.83	2.16	2.57	2.92
	31.12.2010	1.82	2.06	2.67	3.25	3.87
HUF	31.12.2009	6.48	6.84	7.30	7.18	6.43
	31.03.2010	5.56	5.51	5.97	6.31	5.69
	30.06.2010	5.60	5.92	6.31	6.48	5.71
	30.09.2010	5.75	5.95	6.22	6.32	5.68
	31.12.2010	6.28	6.59	7.06	7.31	6.59
PLN	31.12.2009	4.53	5.07	5.77	5.79	5.53
	31.03.2010	4.41	4.58	5.22	5.43	5.25
	30.06.2010	4.25	4.58	5.19	5.40	5.30
	30.09.2010	4.26	4.60	4.91	4.91	4.49
	31.12.2010	4.36	4.85	5.49	5.65	5.15
THB	31.12.2009	1.20	2.13	3.66	4.56	5.21
	31.03.2010	1.61	2.32	3.44	4.07	4.40
	30.06.2010	1.31	1.96	2.93	3.48	3.91
	30.09.2010	1.51	1.96	2.76	3.35	3.85
	31.12.2010	1.78	2.41	3.40	4.07	4.61

Currency	as of dd.mm.yyyy	1 year %	2 year %	5 year %	10 year %	20 year %
TWD	31.12.2009	0.91	1.00	1.86	2.26	2.61
	31.03.2010	0.91	1.10	1.83	2.25	2.56
	30.06.2010	0.98	0.96	1.49	1.83	2.16
	30.09.2010	0.98	0.91	1.32	1.61	1.87
	31.12.2010	1.04	1.00	1.52	1.86	2.17
JPY	31.12.2009	0.34	0.48	0.70	1.44	2.24
	31.03.2010	0.36	0.47	0.76	1.49	2.32
	30.06.2010	0.33	0.46	0.61	1.19	1.93
	30.09.2010	0.27	0.42	0.48	1.03	1.78
	31.12.2010	0.32	0.39	0.57	1.19	1.92

The following table shows the development of illiquidity premiums on swap rates. The values shown are the base illiquidity premiums, i.e. the 100% illiquidity premiums.

100% illiquidity premium (Table 2)

Currency	31.12.2009 bps	31.03.2010 bps	30.06.2010 bps	30.09.2010 bps	31.12.2010 bps	term	phase-out
EUR	52	45	67	52	59	15	5
CHF	6	0	5	4	7	10	5
USD	66	62	83	77	64	30	0
CZK	12	9	17	12	14	15	0
HUF	12	9	17	12	14	10	5
PLN	12	9	17	12	14	15	0
THB	30	30	30	10	10	10	5

According to MCEV Principles G15.3, volatility assumptions should be based on the most recently available information as at the valuation date. Swap-implied volatilities used for the 2010 MCEV calculations are therefore based on 31 December 2010.

Yield-curve extrapolation (Table 3)

Currency	Entry point	Ultimate forward rate %
EUR	30	4.20
CHF	15	3.20
USD	30	4.20
CZK	15	4.20
HUF	15	4.20
PLN	15	4.20
THB	20	4.20
TWD	20	4.20
JPY	20	3.20

Table 4 shows the development of swaption implied volatilities and table 5 shows the swaption implied volatilities for four main currencies.

Development of swaption implied volatilities (Table 4)

Currency	31.12.2009 %	31.03.2010 %	30.06.2010 %	30.09.2010 %	31.12.2010 %
EUR	15.6	15.6	19.1	22.2	18.2
CHF	19.9	25.5	32.9	32.8	31.0
USD	16.3	14.2	18.7	21.1	16.3
KRW	11.7	10.9	11.0	12.2	12.8

Volatilities implied in option on 20 year swaps for EUR and USD; 10 year swaps for CHF from Dec -08 on; with term 10 years at the money. Historical volatilities for KRW till Jun-09, option on 10 year swaps afterwards.

Swaption implied volatilities (Table 5)

	option term	1 year %	2 year %	5 year %	10 year %	20 year %
EUR	31.12.2009	21.1	20.5	17.4	15.6	17.4
	31.12.2010	24.1	22.0	18.7	18.2	22.7
CHF	31.12.2009	27.4	25.1	21.7	19.9	14.7
	31.12.2010	30.0	27.8	26.2	31.0	0.0
USD	31.12.2009	25.9	24.7	20.6	16.3	12.8
	31.12.2010	25.1	23.4	20.2	16.3	13.8
KRW	31.12.2009	16.0	14.0	11.9	11.7	11.2
	31.12.2010	15.1	14.2	13.0	12.8	11.5

Volatilities implied in option on 20 year swaps at the money (10 year swaps for CHF and KRW at year end 2009).

For modeling fixed income stochastic scenarios, the extended 2-factor Black-Karasinski model is used.

For fixed income instruments, parameters are fitted to at-the-money swaption implied volatilities. When calibrating to swaption implied volatilities, the greatest weight has been given to the volatilities implied by options on 20-year swaps or the longest term available, in order to account for the long term nature of the life business.

A range of equity indices is considered. For modeling equity and real estate returns, a short rate excess model is used to generate returns from fixed income dynamics of the economy. A constant volatility model is used where the modeled equity volatility is independent of the option term.

Equity volatilities are taken from implied volatilities of long term equity options at the money, targeted to the longest maturity option available (10 years).

Table 6 shows the equity option implied volatility for the main equity indices.

Equity option implied volatilities at the money (Table 6)

Index		31.12.2009 %	31.03.2010 %	30.06.2010 %	30.09.2010 %	31.12.2010 %
EUR	DAX	27.5	24.8	28.7	26.7	26.4
	EUROSTOXX	28.6	26.5	30.0	28.9	27.3
	CAC	28.7	25.6	29.9	28.8	26.5
CHF	SMI	23.7	22.8	23.7	23.3	21.0
USD	S&P 500	29.0	26.8	33.8	30.6	27.4
KRW	KOSPI	29.4	22.3	24.1	23.6	22.7

Volatilities implied in 10 year equity option at the money

Best estimate levels of volatility are used in the market consistent calibration to derive real estate volatility since meaningful option prices for the property market were not available. The CHF real estate volatility is reviewed and updated in 2010 to reflect the lower volatility in the Swiss specific real estate environment.

Table 7 shows the real estate volatility for the main currencies.

Real estate volatilities (Table 7)

Currency	31.12.2010 %	31.12.2009 %
EUR	13.8	13.8
CHF	8.9	8.9
USD	13.8	13.8
KRW	13.8	13.8

To show the impact of asset mixes and inter-economy relations, correlation assumptions were estimated from historic market data (see Table 8), which was reviewed and updated in 2010. The sensitivity of the embedded value to all correlation parameters is generally small.

Correlation assumptions (Table 8)

	Fixed income 1 year bond rate					Equity Indices				
	EUR	CHF	USD	KRW	CAC	DAX	KOSPI	SMI	Eurotox50	S&P500
Fixed income 1 year bond rate	1.00	0.63	0.48	0.40	0.22	0.22	0.14	0.22	0.23	0.16
EUR		1.00	0.43	0.31	0.11	0.13	0.14	0.13	0.13	0.01
CHF			1.00	0.45	0.22	0.23	0.11	0.22	0.23	0.12
USD				1.00	0.06	0.08	0.10	0.06	0.08	0.03
KRW										
Equity Indices										
CAC					1.00	0.91	0.45	0.88	0.88	0.70
HDAX						1.00	0.47	0.88	0.89	0.66
KOSPI							1.00	0.48	0.43	0.25
SPI								1.00	0.85	0.62
Eurotox50									1.00	0.63
S&P500										1.00

A set of 1000 scenarios is used for stochastic calculations of options and guarantees. To reduce Monte-Carlo errors antithetic random variables are used.

B.2 Capital charge for cost of residual non-hedgeable risk

For 2010 the capital charge for residual non-hedgeable risk was set to 3.25% on a percentile of 99.93% on internal risk capital at the local entity level, which is equivalent to a capital charge of 4% on a 99.5% percentile capital. The latter was agreed as a compromise between European peers to achieve consistency for MCEV throughout the industry.

B.3 Foreign currency exchange rates

Embedded values are calculated in local currencies and converted to Euro using the corresponding exchange rates at the valuation date. Exchange rates are consistent with the rates used in the balance sheet of our IFRS financial accounts. The exchange rates against the Euro are shown in table 9 below.

Main exchange rates against EUR (Table 9)

	2010 €	2009 €
CHF	1.25	1.48
USD	1.34	1.43
KRW	1,522.53	1,670.73
CZK	25.09	26.41
HUF	278.35	270.23
PLN	3.96	4.11
THB	40.44	47.83
TWD	39.11	45.89

B.4 Non-economic assumptions

Non-economic assumptions such as mortality, morbidity, lapse rates and expenses are determined by the respective business units based on their best estimate as at the valuation date.

Best estimate assumptions are set by considering past, current and expected future experience. Future expected changes are taken into account in best estimate assumptions only when sufficient evidence exists and the changes are reasonably certain. Future improvements in productivity can be allowed only if they have been agreed in business plans which have been partly achieved at least by the end of the reporting period, and only to the extent that they are projected to be realized within the first projection year. All the expected expense overruns affecting the covered business, such as holding company operating expenses, overhead costs and development costs in new markets are allowed for in the calculations.

B.5 Tax assumptions

Tax assumptions are set in line with the local tax regime. Tax losses carried forward are considered in the projections. Tax is based on marginal tax impacts. For example, losses on different portfolios can be compensated within one company, and also between Life and P/C portfolios where held in one legal entity. Tax impact of future new business is not allowed for. Table 10 shows the nominal tax rates applied.

Tax assumptions (Table 10)

	2010 %	2009 %
Germany	31	31
France	34	34
Italy	32	32
USA	35	35
Korea	22	22
Switzerland	21	21

C Appendix: Real world economic assumptions

Free shareholder cash flows discussed in 2.5 are based on real world economic assumptions.

The following assumptions are centrally provided:

- Risk free zero coupon yields
- Equity returns
- Real estate returns
- Risk discount rates

Risk free yield curves are the same under real world assumptions as under risk neutral assumptions and are based on swaps (see Table 1).

Reinvestment rates for all asset classes are the forward rates implied in the initial yield curve, which means yields do not stay constant over time, but dynamically follow the forward curve.

Fixed risk premiums are assumed for all risky assets. Return assumptions for equity and real estate are derived from the risk free rate, i.e. the 10 year swap rate, plus a risk premium; see Table 11.

Economic assumptions for real world projection

(Table 11)

	2010	2009
Equity risk premium	5%	5%
Real estate risk premium	20% × 10 year swap rate	

Other economic assumptions applied in the real-world projections such as credit spreads, credit defaults, returns for other asset classes are determined by the respective business units based on the local market data.

All economic assumptions are as of 31 December 2010.

D Appendix: Disclaimer

Cautionary note regarding forward-looking statements

The statements contained herein may include statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. In addition to statements which are forward-looking by reason of context, the words "may", "will", "should", "expects", "plans", "intends", "anticipates", "believes", "estimates", "predicts", "potential", or "continue" and similar expressions identify forward-looking statements. Actual results, performance or events may differ materially from those in such statements due to, without limitation, (i) general economic conditions, including in particular economic conditions in the Allianz Group's core business and core markets, (ii) performance of financial markets, including emerging markets, and including market volatility, illiquidity and credit events (iii) the frequency and severity of insured loss events, including from natural catastrophes and including the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the Euro/U.S. Dollar exchange rate, (ix) changing levels of competition, (x) changes in laws and regulations, including monetary convergence and the European Monetary Union, (xi) changes in the policies of central banks and/or foreign governments, (xii) the impact of acquisitions, including related integration issues, (xiii) reorganization measures, and (xiv) general competitive factors, in each case on a local, regional, national and/or global basis. Many of these factors may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences. The company assumes no obligation to update any forward-looking statement.

No duty to update

The company assumes no obligation to update any information contained herein.

E Glossary and abbreviations

Aggregate policy reserves

Policies in force, especially in life, health and personal accident insurance, give rise to potential liabilities for which funds have to be set aside. The amount required is calculated actuarially.

Best estimate assumptions

A best estimate assumption is the mean of all estimated (probability weighted average) outcomes of the risk variable.

Cost of residual non-hedgeable risk (CNHR)

Explicit allowance for non-hedgeable risks as defined in MCEV Principle 9. It takes into account both non-hedgeable financial risks and non-hedgeable non-financial risks such as operational risks, expense and lapse risks. Both symmetric and asymmetric risks are considered.

Covered business

The contracts to which the MCEV calculation has been applied, in line with the MCEV Principles.

Deferred acquisition costs

Expenses of an insurance company which are incurred in connection with the acquisition of new insurance policies or the renewal of existing policies. These typically include commissions paid and the costs of processing proposals.

Distributable earnings

Distributable earnings are calculated as profits after tax plus changes in ReC plus interests on ReC, all based on real world assumptions.

Embedded value, (EV); Market Consistent Embedded Value (MCEV)

MCEV is a measure of the consolidated value of shareholders' interest in the covered business. It is defined as Net asset value (NAV) + Present value of future profits (PVFP)

- Time value of options and guarantees (O&G)
- Cost of residual non-hedgeable risk (CNHR)
- Frictional Cost of required capital (CReC)

Free surplus (FS)

The market value of any assets allocated to, but not required to support, the in-force covered business at the valuation date, as defined in MCEV Principle 4. Formerly it was named excess capital.

Frictional Cost of required capital (CReC)

Defined in MCEV Principle 8, the additional investment and taxation costs incurred by shareholders through investing required capital in the company. Further, frictional costs may be due to any sharing of investment income on required capital with policyholders.

IAS

International Accounting Standards.

IFRS

International Financial Reporting Standards. Since 2002, the designation IFRS applies to the overall framework of all standards approved by the International Accounting Standards Board. Already approved standards will continue to be cited as International Accounting Standards (IAS).

Implied risk discount rate

Risk discount rate, when used within the traditional deterministic embedded value projection, gives the same value as that arising from the MCEV calculation

Internal Rate of Return (IRR)

The IRR is the discount rate which gives a zero value of new business under real-world projections after allowing for any acquisition expense overrun

Look-through basis

A basis via which the impact of an action on the whole Group, rather than on a particular part of the Group, is measured. Under this basis, the MCEV would allow for the value of profits or losses which arise from subsidiary companies providing administration, investment management, sales and other services in relation to the covered business.

MCEV earnings

Change in EV after initial adjustments and before capital movements

Net asset value (NAV)

Capital not backing local statutory liabilities, valued at market value.

New business margin

Value of new business divided by present value of new business premiums

New business strain

Impact of new business on free surplus in the year business is written: (negative) profit in the first year plus initial capital binding. Negative result in first year reflects the shareholder share in initial expenses

Payback period

Pay back period is the period from the point of sale of new business to the first point in time when the undiscounted sum of distributable earnings, under real world assumptions, is positive.

Present value of future profits (PVFP)

Future (statutory) shareholder profits after tax projected to emerge from operations and assets backing liabilities, including value of unrealized gains on assets backing policy reserves.

Present value of new business premiums (PVNBP)

The present value of future premiums on new business written during the year discounted at the rate applied to that cash flow, as defined in MCEV Principle 10. It is the present value of projected new regular premiums, plus the total amount of single premiums received

Reinsurance

Where an insurer transfers part of the risk assumed to another insurer.

Reserve for premium refunds

That part of the operating surplus which will be distributed to policyholders in the future. This refund of premiums is made on the basis of statutory, contractual, or company by-law obligations, or voluntary undertaking.

Required Capital (ReC)

The market value of assets attributed to the covered business over and above that required to back liabilities for covered business whose distribution to shareholders is restricted as defined in Principle 5. It is determined as the greater of local solvency, capital requirement from internal risk capital and additional capital required by market standards

Reference rate

Rate based on swap rates used for valuation of PVFP in the certainty equivalent. Includes a swap credit adjustment and illiquidity premium.

Risk discount rate (RDR)

Rate used in the previous top-down EV approach to discount future profits.

Stochastic techniques

Techniques that incorporate the potential future variability in assumptions affecting their outcome.

Time value and intrinsic value

An option feature has two elements of value, the time value and intrinsic value. The intrinsic value is that of the most valuable benefit under the option under conditions at the valuation date. Time value is the additional value ascribable to the potential for benefits under the option to increase in value prior to expiry.

Value of inforce (VIF)

Present value of future profits from inforce business (PVFP) minus the time value of financial options and guarantees (O&G) granted to policyholders, minus the cost of residual non-hedgeable risk (CNHR), minus the frictional cost of holding required capital (CReC)

Value of new business (VNB)

The additional value to shareholder created through the activity of writing new business. It is defined as Present value of future profits (PVFP) after acquisition expenses minus the time value of financial option and guarantees (O&G), minus the cost of residual non-hedgeable risk (CNHR), minus the frictional cost of holding required capital, all determined at issue date.

Variable annuities

The benefits payable under this type of life insurance depend primarily of the performance of the investments. The policyholders participate directly in the profits or losses of the underlying investments.

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