# Market Consistent Embedded Value Report 2013



## **CONTENT**

Pages **02–36** 

02	Intr	roduction
02	1.1	Basis of preparation
02	1.2	Covered business
03	Ove	erview of results
03	2.1	Embedded value results
04		New business
05		Analysis of MCEV earnings
07		Movement of free surplus and projected profits
10		Shareholder value not accounted for in Group IFRS equity and Group MCEV
12	2.6	Sensitivities
14	Rec	gional analysis of embedded value
14		Overview
18	3.2	German Speaking Countries
18		3.2.1 Development of value of new business
18		3.2.2 Development of embedded value and free surplus
19		3.2.3 Sensitivities
20	3.3	Germany Life
20		3.3.1 Development of value of new business
20		3.3.2 Development of embedded value and free surplus
21		3.3.3 Sensitivities
22	3.4	Western & Southern Europe
22		3.4.1 Development of value of new business
22		3.4.1 Development of value of new business  3.4.2 Development of embedded value and free surplus
23		3.4.3 Sensitivities
24	3.5	France
24		3.5.1 Development of value of new business
24		3.5.2 Development of embedded value and free surplus
25		3.5.3 Sensitivities
26	3.6	Italy
26		3.6.1 Development of value of new business
26		3.6.2 Development of embedded value and free surplus
27		3.6.3 Sensitivities
28	3.7	Iberia & Latin America
28		3.7.1 Development of value of new business
28		3.7.2 Development of embedded value and free surplus
29		3.7.3 Sensitivities
30	3.8	Growth Markets
30		3.8.1 Development of value of new business
30		3.8.2 Development of embedded value and free surplus
31		3.8.3 Sensitivities
32	3.9	USA
32		3.9.1 Development of value of new business
32		3.9.2 Development of embedded value and free surplus
33		3.9.3 Sensitivities
34	3.10	) Holding
35	Ind	ependent Opinion

Annual Report 2012 — Allianz Group

### Introduction

#### 1.1 Basis of preparation

Embedded value ("EV") represents shareholders' economic value of the in-force life and pension business of an insurance company. Future new business is not included. The EV of Allianz as of 31 December 2013 is disclosed in this report.

Since 2008 Allianz has disclosed its EV in line with the European Insurance CFO Forum Market Consistent Embedded Value Principles © ("MCEV Principles") which were 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.

This document presents the results, methodology and assumptions used to calculate the 2013 EV 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, as we would like to retain a clear split between the segments in line with our primary IFRS accounts.

A description of the MCEV methodology may be found in appendix A. Assumptions are presented in appendix B and a glossary of definitions and abbreviations in appendix D.

The methodology and assumptions used to determine the 2013 EV for the Allianz Group were reviewed by KPMG. Their opinion is included in chapter 4.

#### 1.2 Covered business

The business covered in the EV results 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

The value of reinsurance accepted by Allianz Re is reflected in the Holding results.

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 interest.

Entities that are not consolidated into Allianz IFRS accounts, i.e. entities where Allianz only holds a minority, are not included in the 2013 EV 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 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

### Overview of results

2013 was a year in which market conditions improved in the second half after a difficult start to the year. In most markets interest rates increased, volatilities decreased, credit spreads narrowed and equities performed well.

EV showed a solid increase compared to 2012, reflecting mainly the narrowing of credit spreads, in particular in Italy and Spain.

We had already implemented methodology and assumption changes in 2012 in order to align more closely with what was specified, recommended and expected in the Solvency 2 environment. The changes implemented in 2012 were confirmed in 2013 following the political process for the new framework. No significant new methodological updates were therefore necessary.

The calculation of EV continues to use the illiquidity premium. Testing of results based on the proposed volatility adjustment against those based on the illiquidity premium revealed a minor difference.

During 2014 our reporting will evolve in order to align with Solvency 2 calibration.

The increase in value of new business and margin reflects the generally favourable development of the new business mix. The challenging market conditions at the start of the year motivated management actions and re-pricing that was rewarded later in the year as conditions improved.

At 31 December 2013 Allianz Group's Life & Health EV amounted to EUR 30,492mn, 12% higher than published in 2012.

The value of new business written in 2013 was EUR 952mn, 21% higher than the value published in 2012.

Operating MCEV Earnings were EUR 2,680mn. MCEV Earnings were EUR 5,068mn.

#### 2.1 Embedded value results

Exhibit 1 shows the EV split into its components, the net asset value ("NAV") and the value of in-force ("VIF").

MCEV			Exhibit 1
€MN			
	2013	2012	Change in 2013 (%)
Net asset value	14,689	15,803	-7%
Free surplus	555	-185	not meaningful
Required capital	14,134	15,988	-12%
Value of in-force	15,804	11,500	37%
Present value of future profits	24,205	20,659	17%
Cost of options and guarantees	-3,839	-4,640	-17%
Cost of residual non-hedgeable risk	-2,924	-2,935	0%
Frictional Cost of required capital	-1,639	-1,585	3%
MCEV	30,492	27,304	12%

Higher interest rates, narrower credit spreads, in particular in Italy and Spain, higher equities and lower volatilities were the economic drivers behind the increase of the EV.

Our NAV changed by -7% to EUR 14,689mn. The change was driven by the change in market conditions and capital movements out of the Life & Health segment.

The cost of options and guarantees ("O&G") decreased as a result of higher interest rates and lower volatilities.

The cost of residual non-hedgeable risk ("CNHR") remained at a similar level to the previous year.

Significantly higher free surplus ("FS") was driven by cash earnings and lower required capital ("ReC") that were more than sufficient to cover dividend payments. The lower ReC was driven by more favourable economic conditions.

The FS of Germany Life and in the USA decreased due to the high capital movements during 2013.

Although the Group's FS was positive, there were some entities that reported negative values.

The FS in Spain and Belgium, although still negative, improved due to narrower credit spreads.

In South Korea the ReC was adjusted to take into account the negative VIF. This increased the ReC and hence reduced the FS. The negative VIF was driven by old blocks of business with relatively high guarantees.

The FS of Taiwan, although still negative, increased after a change in ReC methodology.

In these countries, however, the internal economic view on capital requirement is much more stringent than the local capital requirements. Based on local capital requirements, the companies are in fact capitalized above the required regulatory percentages.

The USA reported a significant increase in VIF and decrease of ReC. This did not, however, result in a correspondingly high increase in FS because of a high capital transfer.

Drivers of the change in EV during the year are explained in more detail in the following chapters.

#### 2.2 New business

Exhibit 2 shows the value of new business ("VNB") at point of sale calculated as the sum of quarterly disclosed values. Values are calculated using assumptions at the start of the quarter in which the business was sold. Appendix A.5 contains a description of our VNB methodology.

VALUE OF NEW BUSINESS			Exhibit 2
€MN			
	2013	2012	change in 2013 (%)
Value of New Business	952	790	21%
New Business Margin¹(in%)	2.1%	1.8%	0.3%-p
Present value of new business premiums	45,337	43,540	4%
APE Margin 2 (in %)	19.4%	16.9%	2.5%-p
Single Premium <sup>3</sup>	27,258	24,134	13%
Recurrent Premium	2,182	2,263	-4%
Recurrent premium multiplier⁴	8	9	-3%

- 1\_NBM = VNB / Present value of future new business premiums
- 2—APE margin = VNB / (recurrent premium + single premium / 10)
- 3—In Germany, single premium excludes Parkdepot (EUR 1,320mn)
- 4—Recurrent Premium Multiplier = (PVNBP single premium) / recurrent premium

Allianz's VNB in 2013 was EUR 952mn, 21% higher than in 2012.

The new business margin ("NBM") increased from 1.8% to 2.1%. Margins are generally under pressure but we have managed our business to maintain a strong NBM. Positive developments of business mix were seen in particular in the USA, France, Italy, Belgium, Spain and Poland.

Modest increases of recurring premiums in most markets were more than offset by lower volumes in Germany, resulting in an overall decrease.

The increase in single premium business was driven by higher volumes in Germany Life and Italy.

Overall, new business premium volumes were slightly higher.

Exhibit 3 summarizes the change in VNB from 2012 to 2013. Further details on the drivers for the change in each region may be found in the regional analyses in chapter 3.

#### DEVELOPMENT OF VALUE OF NEW BUSINESS

Exhibit 3

€MN			
	Value of New Business	New Business Margin (%)	Present Value of NB Premiums
Reported Value as at 31 December 2012	790	1.8%	43,540
Change in Foreign Exchange	-11	0.0%	-120
Change in Allianz interest	1	0.0%	4
Adjusted Value as at 31 December 2012	780	1.8%	43,424
Change in volume	20	0.0%	1,031
Change in business mix	129	0.3%	-99
Change in assumptions	23	0.0%	980
Value of New business as at 31 December 2013	952	2.1%	45,337

The foreign exchange adjustment of EUR -11mn was driven mainly by Asian exchange rate changes during 2013.

The change in Allianz interest reflects the changes in Group share in Malaysia and Slovakia compared to the previous year.

New business premium volume grew by a healthy 25% in Western & Southern Europe. Overall, the increase in new business premium volume impacted VNB by EUR 20mn.

The business mix in the USA, Switzerland, France, Italy and Belgium, in particular, had a positive effect on VNB. In 2013 the change in Germany Life's business mix had a negative effect on VNB.

Germany Life's business mix was driven by a decrease of recurring premium business in line with the German market. Single premium business increased significantly. Germany Life responded to the market with the launch of its "Perspektive" product in late 2013. The positive effects of the product, using alternative guarantee concepts, will emerge as sales pick up in the new year.

Management in the USA responded early in the year to the challenging market conditions. The benefits of re-pricing became evident later in the year as the market improved.

Business in Switzerland using alternative guarantee structures grew successfully.

Growth in individual life through partnerships was managed in France, mainly bank assurance to foster unit-linked sales, and the salaried sales force. Higher volumes on group protection contracts followed strategy.

In Italy there was a shift to unit-linked business with no guarantees. This had a significantly positive impact on the NBM and VNB.

Guarantees underlying new business in Belgium were reduced. This management response to the market resulted in a higher margin.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Overall, the change in business mix impacted VNB by EUR 129mn and NBM by 30bps.

The change in assumptions reflects the sum of four quarters' changes. Average interest rates in 2013 were higher than in 2012. This line item also captures methodology changes and changes in scope. The change in assumptions impacted VNB by EUR 23mn with a negligible impact on NBM.

Chapter 3 provides further details on regional development.

### 2.3 Analysis of MCEV earnings

Exhibit 4 presents the change in EV and FS from the value published for 2012 to the value as of 31 December 2013.

ANALYSIS	OF FARNINGS OF F	MBEDDED VALUE

Exhibit 4

€MN	E	arnings on MO	CEV analysis	
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	-185	15,988	11,500	27,304
Foreign Exchange Variance	2	-338	-44	-380
Acquired / Divested business	5	62	168	235
Others	410	0	0	410
Adjusted Opening MCEV as at 31 December 2012	231	15,712	11,625	27,568
Value of new business at point of sale	-33	0	985	952
Expected existing business contribution				
reference rate	148	0	582	730
in excess of reference rate	610	0	624	1,234
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	2,186	-708	-1,477	0
on new business	-1,654	961	693	0
Experience variance	192	-7	216	401
Non-economic assumption changes	3	-3	-97	-96
Other operating variance	-319	290	-513	-541
Operating MCEV earnings	1,132	534	1,014	2,680
Economic variances -	1,336	-2,112	3,165	2,388
Other non operating variance	0	0	0	0
Total MCEV earnings	2,468	-1,579	4,179	5,068
Net capital movements	-2,144	0	0	-2,144
Closing MCEV as at 31 December 2013	555	14,134	15,804	30,492

The initial adjustments included the following changes:

- Foreign exchange variance (EUR -380mn) was driven mainly by the strengthening of the Euro against the US Dollar and Indonesian Rupiah.
- Acquired / Divested business (EUR 235mn) reflects:
  - The acquisition of Yapi Kredi in Turkey that impacted EV by EUR 172mn.
  - The inclusion of the results in Lebanon that impacted EV by EUR 55mn.
  - The acquisition of Pastor Vida in Spain that impacted EV by EUR 7mn.
  - The acquisition of business in Taiwan that impacted EV by EUR 2mn.
  - Changes in Group share Malaysia.
- Others (EUR 410mn) reflects a correction of the split of the NAV between the Life and P&C segments in France.

The key components of the change in 2013 were as follows:

- Value of new business at point of sale (EUR 952mn) takes into account all expenses with respect to new business written during 2013, including acquisition expense overruns. Development of the VNB is described in chapter 2.2.
- Expected existing business contribution is comprised of two elements:
  - Expected existing business contribution with reference rates (EUR 730mn) shows the unwinding of the discount on EV with reference rates used in the market consistent projection. For the in-force portfolio at the start of the year, it contains notional interest for one year using the start of the vear assumptions. Since ReC 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 FS. The VIF increases as all future profits now require one year less discounting. For new business, the value reflects the progression from point of sale to end of year, based on point of sale assumptions. This step also contains the release from risk with respect 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 1,234mn) shows the additional earnings in EV consistent with management expectations. In this step, based on normalized real-world assumptions shown in appendix B, risk premiums on equity, real estate and corporate bonds are expected to materialize in the first projection year 2013,

whereas reference rate assumptions are kept unchanged for projection years 2014 onwards. This item was higher than in 2012, driven mainly by the USA and Italy where management expectations changed in line with the capital markets.

- Transfer from value of in-force and required capital to free surplus shows the effect of the realization of the projected net profits from the VIF to the NAV. It reduces the VIF and increases NAV, but does not have any impact on the EV as it only contains the release of profits included in the VIF to the FS during the year. It also includes the projected release from required capital to free surplus.
- This step is shown separately for in-force at the beginning of the period and new business written during the period. For new business, it shows the new business strain before acquisition expense overruns (EUR 693mn impact on VIF). The amount of additional required capital to be held for new business (EUR 961mn impact on ReC) increases the strain on the FS at the point of sale. The total strain from new business on the FS is the combined impact of expense strain and initial capital binding, an impact of EUR -1,654mn on FS. Taking into account the acquisition expense overrun of EUR 33mn the new business strain increases to EUR 1,687mn.
- Experience variances (EUR 401mn) reflects the impact of deviations of actual experience from expectations during the year with respect to non-economic factors, e.g. lapses, mortality, expenses and crediting. This item was driven by a number of offsetting effects, the most significant being:
  - In Germany Life the timing of the profit transfer changed and resulted in lower capital gains. This impacted EV by EUR
  - Germany Health's development of its in-force portfolio was better than expected. The impact on EV was EUR 90mn.
  - In France the development of the group business impacted EV by EUR 246mn.
  - Lower fixed annuity lapses and annuitizations in the USA impacted EV by EUR 56mn.
  - This item also includes one-off costs of EUR 42mn. The main driver was the one-off cost in Italy of EUR 41mn related to the merger of RB Vita and AIV into Allianz S.p.A. Other one-off costs are described in the regional commentaries in chapter 3.
- Non-economic assumption changes (EUR -96mn) reflects changes in non-economic assumptions such as those for lapses, mortality and expenses. The main drivers for the change in 2013 were higher expense and lapse assumptions in Italy and higher expense assumptions in South Korea. These effects were somewhat offset by the positive effect of updated mortality and morbidity assumptions in Germany.
- Other operating variances (EUR -541mn) includes operating impacts not included above, such as management reaction to

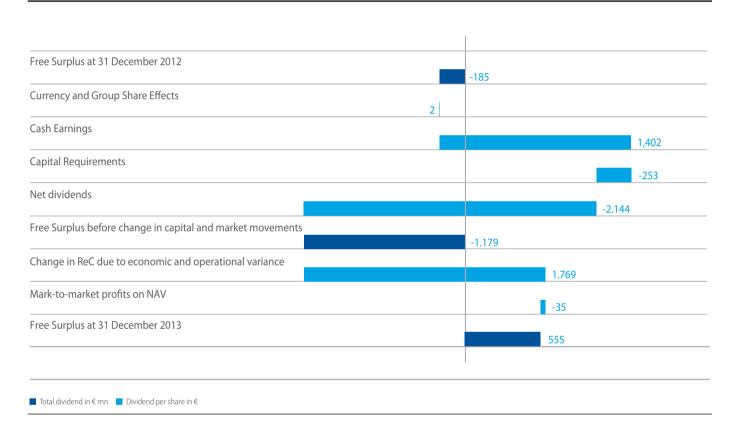
- economic changes and model changes. Management may, for example, react by changing crediting and investment strategies. The drivers are described in the regional parts in chapter 3.
- Operating MCEV earnings (EUR 2,680mn) reflects the change of the adjusted opening EV due to all operating drivers described above. The 2013 operating MCEV earnings amounts to 10% of the adjusted opening EV.
- Economic variances (EUR 2,388mn) includes the impacts of changes in interest rates, actual development of financial markets and 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 change in interest rates and credit spreads impacted EV by EUR 1,517mn. The change in equity markets during the year had an impact of EUR 591mn. Lower volatilities impacted EV by EUR 280mn. Development by region is described in chapter 3.
- Other non-operating variances was reported as EUR omn.
- Total MCEV earnings (EUR 5,068mn) summarizes the movements during the year due to all drivers described above. The 2013 MCEV earnings increased to 18% of the adjusted opening EV.
- Net capital movement (EUR -2,144mn) reflects net movement of dividends paid by and capital injections paid to our life companies. The net value increased, driven by large capital transfers out of Germany Life and the USA. Further details may be found in the regional parts in chapter 3.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

# 2.4 Movement of free surplus and projected profits

The free surplus represents the capital over and above the capital required to run the business. The following diagram presents the development of the free surplus during the year from 2012 to 2013.

#### FREE SURPLUS MOVEMENT



The free surplus increased from EUR -185mn, turning positive to EUR 555mn during 2013. The drivers of the change were:

- Cash earnings (EUR 1,402mn) reflects the actual local P&L effect in the current reporting year. This contains cash earnings from in-force (EUR 2,127mn) and cash strain from new business (EUR -725mn) including acquisition expense overruns. The correction of the split of the NAV between the Life and P&C segments in France is reflected here.
- Capital requirements (EUR -253mn) includes capital release from in-force (EUR 708mn) and capital strain from new business (EUR -961mn).
- Net dividends (EUR -2,144mn) reflects net capital transfers. The relatively high value was driven by high capital transfers out of

- Germany Life and the USA. A reversion to a normalized dividend in the order of EUR 1.4bn could be expected in future.
- Change in capital due to economic and operational variances (EUR 1,769mn) was higher than the previous year, driven by the decrease in ReC. Change in ReC is described in chapter 3.1.
- Mark-to-market profits on NAV (EUR -35mn) reflects market movements.

The colour coding in the following diagram shows how the FS movements are reflected in the analysis of MCEV earnings. (Note that a minus sign should be applied to ReC values.)

FREE SURPLUS MOVEMENT		ANALYSIS OF MCEV EARNINGS	FS	REC	NAV
Free surplus 31 December 2012	-185	Free surplus 31 December 2012	-185	15.988	15.803
Currency & GS effects	2	Foreign Exchange Variance	2	-338	-336
		Acquired / Divested business	5	62	66
Cash earnings		Other	410	0	410
In-force cash earnings	2,127				
New business cash strain	-725	Value of new business at point of sale	-33	0	-33
Capital requirements		Expected existing business contribution - reference rate	148	0	148
In-force capital release	708	Expected existing business contribution -			
New business capital strain	-961	in excess of reference rate	610	0	610
		Transfer from VIF and required capital to free surplus - on in-force	2.186	-708	1.477
Net dividends	-2,144	Transfer from VIF and required capital to free surplus - on new business	-1.654	961	-693
Change in capital due to economic and operational variances	1,769				
		Experience variances	192	-7	185
Mark-to-market profits on NAV	-35	Non-economic assumption changes	3	-3	1
		Other operating variances	-319	290	-29
		Economic variances	1,336	-2,112	-777
		Other non-operating variances	0	0	0
		Net capital movements	-2,144	0	-2,144
Free surplus 31 December 2013	555	Free surplus 31 December 2013	555	14.134	14.689

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

To present the timing of release of profits, Exhibit 5 shows the expected maturity profile of the present value of future profits ("PVFP") used for MCEV.

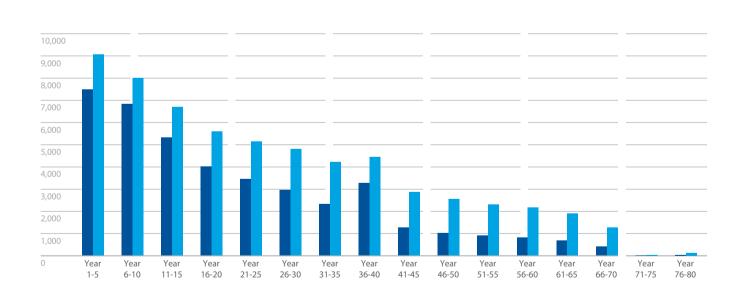
The table shows discounted risk-neutral profits with respect to the current in-force portfolio. Future new business is not considered.

REMAINING PRESENT VALUE OF FUTURE PROFITS		Exhibit 5
€MN		
End of year	PVFP	% of initial PVFP
year 5	18,410	76%
year 10	14,601	60%
year 15	11,989	50%
year 20	9,920	41%
year 25	8,053	33%
year 30	6,551	27%
year 35	5,458	23%
year 40	3,220	13%
year 45	2,573	11%
year 50	2,031	8%

Timing of the cash-flows depends very much on the underlying portfolio, and varies over the Group. Within Allianz there are short term portfolios, such as 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 0.40% and the corresponding real-world ratio was 0.51%.

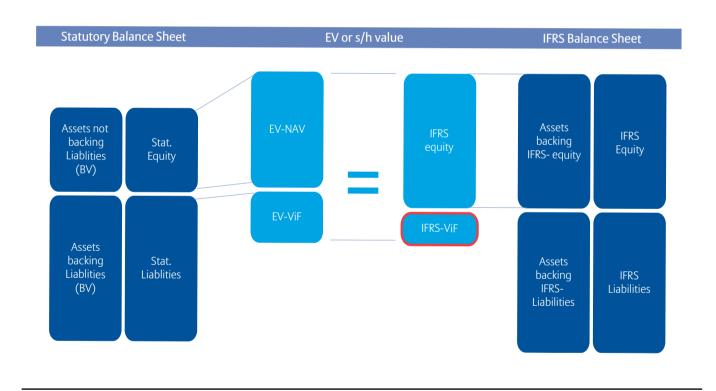
#### PATTERN OF RISK NEUTRAL AND REAL WORLD PROFITS



Risk Neutral Real World

# 2.5 Shareholder value not accounted for in Group IFRS equity and Group MCEV

Allianz EV 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"). Local balance sheet and P&L are therefore the starting points for the EV projections of our subsidiaries.



The result of these calculations is a balance sheet reflecting the shareholder value of the in-force business. The accounting principles applied in the projection are required to determine realistic best estimate cash-flows. Apart from this, in the definition of EV the local balance sheet also determines the split of the total EV into NAV, i.e. the value of the assets not backing liabilities which can also be interpreted as the equity component of the EV, and VIF, 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 EV 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

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

not included in the EV, we compare it to the IFRS equity for covered business excluding any goodwill.

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

Exhibit 6 shows that of the EUR 15,804mn VIF, the future related element of EV, EUR 9,018mn 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 EQ	UITY	Exhibit 6
€MN		
	2013	2012
Value of in-force	15,804	11,500
Deferred acquisition cost / value of business acquired	-16,254	-13,600
Difference in IFRS reserves compared to statutory reserves	16,833	17,162
Shareholders' portion of unrealized capital gains included in PVFP	-7,472	-12,368
Asset valuation differences	2,655	3,580
Other adjustments	-2,548	-3,031
Additional value not accounted for in IFRS shareholders' equity	9,018	3,242

The components of the table are as follows:

- Deferred acquisition cost / value of business acquired (EUR -16,254mn) reflects 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 16,833mn) 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 modelling. The main reason for this difference is that in many local statutory accounting models, instead of setting up a DAC 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 unrealized capital gains on investments not valued at market value within IFRS, due to higher interest rates, largely in Germany and
- Shareholders' portion of unrealized capital gains included in PVFP (EUR-7,472mn) reflects that, 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. The change from last year is related largely to lower unrealized capital gains in the USA and Germany.
- Asset valuation differences (EUR 2,655mn) is the shareholder value of the difference between market value and book value of assets (valued in IFRS at book value).
- Other adjustments (EUR -2,548mn) includes various items not included above relating to valuation differences under MCEV and IFRS such as different tax treatment. The change from 2012 to 2013 was driven by tax effects on the decrease of UCG and consolidation entries, especially with respect to special funds in France and Germany.

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
€MN		
	2013	2012
IFRS equity for Allianz Group (net of minorities)	50,084	53,553
Additional value not accounted for in IFRS shareholders' equity	9,018	3,242
Deduct Goodwill for Life/Health 1	-2,159	-2,175
Group MCEV 1	56,943	54,620
Covered business MCEV	30,492	27,304
IFRS equity non covered business & financing adjustments	26,451	27,317

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 2013 was EUR 56,943mn, 4% higher than the value for 2012 of EUR 54,620mn. The increase was after a dividend payment to shareholders of EUR 2,039mn.

Exhibit 8 shows the analysis of earnings of Group MCEV. "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.

€MN			
	Covered business MCEV	Non covered business & financing adj. IFRS	Total Group MCEV
Opening Group MCEV as at 31 December 2012	27,304	27,316	54,620
Opening adjustments	265	-4,023	-3,758
Adjusted Opening MCEV as at 31 December 2012	27,568	23,293	50,861
Operating MCEV earnings <sup>1</sup>	2,680	7,357	not meaningful
Non operating MCEV earnings <sup>2</sup>	2,388	-4,385	not meaningful
Non covered: IFRS net income		4,186	
Non covered: IFRS operating profit		-7,357	
Non covered: OCI		-1,214	
Total MCEV earnings	5,068	2,972	8,040
Other movements in IFRS net equity		-7	-7
Closing adjustments	-2,144	193	-1,951
Closing MCEV as at 31 December 2013	30,492	26,451	56,943

- 1—For the non-covered business, IFRS Operating Profit of the Allianz Group excluding the Life/Health Segment was used as Operating MCEV earnings.
- 2—For the non covered business, the non operating MCEV earnings were calculated as follows:
  - . IFRS Net income of the Allianz Group excluding the Life/Health Segment
  - IERS Operating Profit of the Allianz Group excluding the Life/Health Segment
  - · Changes in OCI (Unrealized Gains / Losses) of the Allianz Group attributable to shareholders not included in covered business

Group MCEV increased by EUR 2,323mn, driven by the increase in covered business MCEV of EUR 3,188mn. The change in non covered business was driven by a number of offsetting effects. The opening adjustment of the non covered business reflects the IAS19 restatement impact of EUR -3,165mn, FX effects of EUR -823mn and other adjustments amounting to EUR -35mn. The higher operating profit of the non covered business, amounting to EUR 7,357mn, was mainly due to P&C business. The increase in covered business MCEV is described in detail in the remainder of this report. The total movement of Group MCEV was reduced by capital movements reported as closing adjustments.

Closing adjustments includes dividends paid from Allianz SE to shareholders amounting to EUR 2,039mn and a capital increase to Allianz SE of EUR 55mn.

#### Sensitivities 2.6

Sensitivity testing with respect to the underlying best estimate assumptions is an important part of EV calculations. Both economic and non-economic factors are tested. The same management rules and policyholder behavior have been assumed in the sensitivities as for the base case. It should be noted that the sensitivities are usually correlated so that the impact of two events occurring simultaneously is unlikely 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 sensitivities presented in the table below correspond to the primary economic and non-economic factors specified in the MCEV Principles. The magnitude of the assumption shifts are not indicative of what may or may not actually occur.

€MN				
	Inforce N	<b>ICEV</b>	New Busine	ess VNB
	EUR mn	%	EUR mn	%
Central Assumptions	30,492	100%	952	100%
Required Capital equal to local solvency capital	748	2%	47	5%
EV change by economic factors				
Risk Free Rate – 100bp	-2,412	-8%	-115	-12%
Risk Free Rate +100bp	968	3%	24	3%
Risk Free Rate – 50bp	-969	-3%	-53	-6%
Risk Free Rate +50bp	584	2%	15	2%
Charge for CNHR +100bp	-831	-3%	-52	-5%
Equity values – 20 %	-1,635	-5%	-50	-5%
Swaption volatilities +25%	-677	-2%	-28	-3%
Equity option volatilities +25 %	-591	-2%	-35	-4%
EV change by non-economic factors				
Lapse Rates – 10%	539	2%	98	10%
Maintenance Expenses – 10%	795	3%	59	6%
Mortality + 15 % for products with death risk	-494	-2%	-49	-5%
Mortality – 20% for products with longevity risk	-1,303	-4%	-38	-4%

The shocks applied to equity values and mortality sensitivities have changed since 2012. The changes were made to align with Solvency 2 specifications. Details may be found in the relevant paragraphs that follow.

A description of the disclosed sensitivities follows. Details of the sensitivities by region are provided in chapter 3.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

#### 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 EV increases by only EUR 748mn or 2%.

#### Sensitivity to a decrease/increase of the underlying market riskfree rates

This sensitivity shows by how much the EV would change if market interest rates in the different economies were to 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.

Yield-curve extrapolation is applied in sensitivities to interest rate shifts. This means that only the deep and liquid part of yield-curves are subject to parallel shifts with the ultimate forward rate ("UFR") being kept stable, in line with its design under Solvency 2.

Due to the asymmetric and non-linear impact of embedded financial options and guarantees, falling market rates have a higher impact on EV than rising interest rates and the impact increases for each further step down. A shift of -100bps in interest rates results in a reduction of the Group's EV of EUR 2,412mn or 8%. This is lower than the corresponding impact shown for 2012, driven mainly by higher interest rates and lower volatilities. VNB decreases by EUR 115mn.

We ran additional sensitivities to test the sensitivity of the UFR. In contrast to the sensitivities in which the deep and liquid part of the yield-curves are shocked, in these additional sensitivities we shock the UFR by -200bps and keep the deep and liquid part of the yield-curves unchanged. Reducing the UFR by 200bps reduces the Group's EV by EUR 3,087mn. Similarly, the VNB reduces by EUR 119mn.

In 2012 the corresponding sensitivity applied a -100bps reduction to the UFR.

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

The effect of increasing the capital charge for residual non-hedgeable risk by 100bps decreases the EV by EUR 831mn. Appendices A.4.3 and B.2 contain explanations of the cost of residual non-hedgeable risk.

### Sensitivity to a decrease in equity values at the valuation date by

This sensitivity is designed to indicate the impact of a sudden change in the market values of equity 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 20% reduces EV by EUR 1.635mn.

Note that the shock used to calculate this sensitivity is 20% compared to 10% used in previous years. The corresponding sensitivity in previous years also reflected shocked real estate values whereas this year's sensitivity considers only shocked equity values. The change to the sensitivity shocks was made in order to align with Solvency 2 specifications.

#### Sensitivities to increases in volatilities for fixed income and equity by 25%

This sensitivities show the effect of increasing all volatilities, i.e. swaption implied volatilities, equity option implied volatilities and real estate volatility, by 25% of the assumed rate. An increase in volatilities leads to a higher O&G for traditional participating business.

EV decreases by EUR 677mn or 2% for an increase in swaption implied volatility.

EV decreases by EUR 591mn or 2% for an increase in equity option implied volatility.

Volatility sensitivities were lower than in 2012 due to lower market volatilities and lower O&G values.

#### Sensitivity to a decrease in lapse rates by 10%

The impact of a 10% proportionate decrease in projected lapse rates is an increase in EV of EUR 539mn.

#### Sensitivity to a decrease in maintenance expenses by 10%

The impact of a 10% decrease in the projected expenses on EV is EUR 795mn or 3% as future projected profits would increase. This sensitivity is similar to last year.

#### Sensitivity to changes in mortality and morbidity rates

These sensitivities show the impact of an increase in mortality rates by 15% for products with death risk and a decrease in mortality rates of 20% for products exposed to longevity risk. Since the future experience for the different insured populations in the two product groups might vary significantly, the impacts of this sensitivity are shown separately.

For products with death risks the impact of an increase in mortality rates by 15% leads to a decrease of EUR 494mn or 2%.

The impact of a decrease in mortality rates by 20% on products exposed to longevity risk leads to a decrease of EUR 1,303mn or 4%.

Note that, in order to align with Solvency 2 specifications, the shocks applied have changed from -5% used in previous years.

The impact of non-economic shocks in general are low as they are mitigated by the ability to share technical profits and losses with policyholders, particularly in Germany.

### Regional analysis of embedded value

#### 3.1 Overview

The following tables provide overviews of the contribution of the various regions and operating entities to the EV and VNB results of the Allianz Group. Detailed analyses for each region follow.

The regions are defined as:

#### German Speaking Countries

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

#### Western & Southern Europe

- Life operations in France including partnerships and French VA business.
- Italian and Irish life subsidiaries of Italy.
- Life operations in Belgium, Netherlands, Luxembourg, Greece and Turkey.

#### Iberia & Latin America

Life operations in Spain, Portugal and Mexico.

#### **Growth Markets**

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

#### USA

Allianz Life USA.

#### Holding

Holding expenses and internal life reinsurance.

In the following chapters, the analysis is presented for each region, with specific focus on our larger life operations:

- Germany Life
- France
- Italy
- USA

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Exhibit 10 provides an overview of the 2013 EV by region.

EMBEDDED VALUE RESULTS BY REGION Exhibit 10

€MN												
	German Speaking Countries		Western & Southern Europe			Iberia and Latin America	Growth Markets			USA	Holding	Total
		Germany Life		France	Italy			Asia- Pacific	CEEMA			
Net asset value	3,317	1,588	5,482	2,476	2,021	594	1,601	1,124	461	3,652	43	14,689
Free surplus	1,039	156	804	582	372	-573	-997	-1,297	290	365	-83	555
Required capital	2,278	1,432	4,677	1,893	1,649	1,167	2,599	2,421	171	3,287	125	14,134
Value of Inforce	10,419	7,753	3,894	2,876	394	204	45	-473	513	1,652	-410	15,804
Present value of future profits	13,818	10,560	5,609	3,825	967	455	998	345	641	3,659	-335	24,205
Cost of options and guarantees	-1,560	-1,657	-455	4	-381	-30	-305	-236	-63	-1,433	-56	-3,839
Cost of residual non-hedgeable risk	-1,305	-863	-881	-701	-88	-94	-376	-320	-54	-251	-15	-2,924
Frictional Cost of required capital	-534	-288	-379	-252	-103	-127	-273	-262	-11	-323	-3	-1,639
MCEV	13,736	9,340	9,376	5,351	2,415	798	1,646	651	974	5,303	-367	30,492
in % of total MCEV	45%	31%	31%	18%	8%	3%	5%	2%	3%	17%	-1%	100%
Value of Inforce by product type												
Savings & Annuities	8,297	7,753	1,966	1,870	-126	-318	19	-179	195	1,035	-508	10,492
Protection & Health	2,074	0	1,320	1,005	175	502	-331	-597	265	617	98	4,279
Unit-linked without Guarantees	48	0	608	0	345	19	357	304	53	0	0	1,032

The EV of the Group increased by EUR 3,188mn to EUR 30,492mn.

The increase was driven by healthy new business and positive economic variances.

More detail may be found in the regional chapetrs that follow.

Exhibit 11 provides an overview of ratios of ReC to statutory reserves and local solvency 1 requirements respectively.

Required capital decreased by EUR 1,854mn to EUR 14,134mn in 2013. The overall decrease was driven by improved market conditions.

REQUIRED CAPITAL Exhibit 11

		2013		2012			
	Required capital	% of reserve	% of solvency requirement	Required capital	% of reserve	% of solvency requirement	
	EUR mn	%	%	EUR mn	%	%	
German Speaking Countries	2,278	1.2%	307%	2,494	1.4%	239%	
thereof: Germany Life	1,432	0.9%	not meaningful	1,339	0.9%	not meaningful	
Western & Southern Europe	4,677	3.7%	130%	5,282	4.5%	155%	
thereof: France	1,893	2.7%	100%	1,738	2.6%	100%	
thereof: Italy	1,649	4.2%	147%	2,192	6.0%	192%	
Iberia & Latin America	1,167	18.0%	383%	1,562	26.3%	549%	
Growth Markets	2,599	11.4%	304%	2,862	12.0%	331%	
thereof: Asia-Pacific	2,421	12.7%	357%	2,642	13.5%	400%	
thereof: CEEMA	171	5.0%	100%	185	5.6%	110%	
USA	3,287	4.7%	244%	3,651	5.4%	272%	
Holding and Internal Reinsurance	125	6.5%	100%	136	6.1%	100%	
Total	14,134	3.4%	203%	15,988	4.0%	226%	

The decrease in the German Speaking Countries was driven by the lower ReC in Switzerland as a result of better market conditions and less stringent local Swiss Solvency Test requirements.

For Germany Life, ReC is defined by Allianz Group as a percentage of reserves to reflect local market standards. The internal ReC and local solvency requirements are significantly lower.

Germany Life's ReC as a proportion of solvency requirement is reflected as "not meaningful" because its local solvency requirement is close to zero. The local solvency requirement is defined as a percentage of reserves less an amount that reflects the value of future profits of the in-force book.

The lower ReC of Western & Southern Europe was driven by lower capital requirements in Italy as a result of narrower spreads.

ReC in France, defined as local solvency capital, increased in line with the increase in reserves.

Although the ReC in Belgium is also relatively high, it too reduced in line with narrowing spreads.

The decrease in ReC in Iberia & Latin America was driven by Spain where sovereign spreads narrowed.

In South Korea and Taiwan, negative spreads on legacy business drove the negative VIF and relatively high ReC.

A definition of ReC may be found in appendix A.3.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

#### VALUE OF NEW BUSINESS AT POINT OF SALE BY REGION

Exhibit 12

€MN												
	German Speaking Countries		Western & Southern Europe			Iberia and Latin America	Growth Markets			USA	Holding	Total
		Germany Life		France	Italy			Asia- Pacific	CEEMA			
Value of New Business	406	354	202	51	100	55	166	106	57	219	-96	952
in % total VNB	43%	37%	21%	5%	10%	6%	17%	11%	6%	23%	-10%	100%
New Business Margin in %	2.7%	2.8%	1.2%	0.6%	1.7%	3.5%	3.0%	2.4%	6.4%	3.0%	n/a	2.1%
Present value of NB premium	14,815	12,501	16,192	8,361	6,026	1,566	5,485	4,478	889	7,279	0	45,337
APE Margin¹in %	32.0%	32.7%	11.7%	6.5%	14.0%	27.6%	17.0%	13.6%	31.8%	29.7%	n/a	19.4%
Single Premium <sup>2</sup>	6,340	5,983	10,756	4,544	5,202	929	2,415	2,073	224	6,818	0	27,258
Recurrent Premium	636	486	652	331	192	107	732	575	157	55	0	2,182
Recurrent Premium multiplier <sup>3</sup>	13	13	8	12	4	6	4	4	4	8	0	8
IRR in %	17.8%	19.0%	9.1%	6.7%	20.1%	11.3%	14.4%	13.2%	19.8%	14.2%		
Payback Period (in years)	5.3	5.0	8.1	11.4	3.7	7.4	5.8	6.4	3.9	5.8		
Value of New Business by product type												
Savings & Annuities	367	354	38	12	-1	16	48	23	22	205	-106	568
Protection & Health	39	0	67	39	19	32	78	46	32	14	10	239
Unit-linked without Guarantees	1	0	97	0	82	8	40	37	3	0	0	145
New Business Margin by product type												
Savings & Annuities in %	2.7%	2.8%	0.5%	0.3%	0.0%	1.4%	2.3%	1.5%	5.3%	3.0%	61.5%	1.8%
Protection & Health in %	3.6%	n/a	1.8%	1.1%	16.7%	11.8%	8.3%	7.0%	11.3%	4.0%	5.7%	3.7%
Unit-linked without Guarantees in %	3.4%	n/a	2.0%	n/a	2.0%	5.6%	1.6%	1.6%	1.6%	n/a	n/a	1.9%

<sup>1—</sup>APE margin = Value of new business / (recurrent premium + single premium/10)

Exhibit 12 provides an overview of VNB by region.

The VNB increased by 21%, driven mainly by the positive development of business mix and management action motivated by difficult market conditions.

The NBM increased from 1.8% to 2.1%, driven by management action that led to a positive development of the business mix and change in assumptions.

The USA, Italy, France, Switzerland and Belgium stand out with respect to re-pricing and management of new business mix.

Recurring premium business in 2013 was slightly below the level achieved in 2012. Although many countries reported increases, the overall value was somewhat dampened by decreases in the German market. Single premium business however increased, resulting in an overall increase in the present value of new business premiums in 2013.

<sup>2—</sup>In Germany, single premium excludes Parkdepot and Kapitalisierungsprodukt

 $<sup>{\</sup>it 3---} Recurrent\ Premium\ Multiplier = (PVNBP\ -\ single\ premium)\ /\ recurrent\ premium}$ 

### 3.2 German Speaking Countries

The EV of the German Speaking Countries increased slightly from EUR 13,297mn to EUR 13,736mn.

#### 3.2.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written by the German Speaking Countries in 2013 was EUR 406mn, 10% lower than the value published in 2012. Exhibit 13 presents an analysis of the change in VNB.

The decrease in VNB was driven by lower new business volumes and less profitable business mix in Germany. The development of the business mix was however positive in Switzerland and Austria as a result of re-pricing and new products with lower and alternative guarantee structures.

#### DEVELOPMENT OF VALUE OF NEW BUSINESS

Exhibit 13

€MN	Value of New Business	New Business Margin (%)	Present Value of NB Premium
Reported Value as at 31 December 2012	453	2.8%	16,017
Change in Foreign Exchange	0	0.0%	-29
Change in Allianz interest	0	0.0%	8
Adjusted Value as at 31 December 2012	453	2.8%	15,996
Change in volume	-31	0.0%	-1,525
Change in business mix	-18	0.0%	-53
Change in assumptions	2	-0.1%	397
Value of new business as at 31 December 2013	406	2.7%	14,815

Fluctuations of the Swiss Franc against the Euro had a negligible impact.

New business premium volumes decreased in all German Speaking Countries. Germany Health's decline is measured against particularly high production in 2012 that was driven by "last call" sales during the second half of 2012 before "unisex" rates were introduced at the start of 2013.

Decreases in Germany Life, Switzerland and Austria were in line with the market.

Germany Life's decrease in new business premiums is described in the next chapter.

Overall, the change in new business premium volumes impacted VNB by EUR -31mn.

The lower proportion of recurring new business premiums in Germany Life was the main driver of the negative effect of the change in business mix. The new product "Perspektive" was launched in the second half of the year and the benefits of its alternative guarantee concept should become evident during the coming year. In Switzerland products with a redesigned guarantee structure already had a significantly positive impact on their margin in 2013. Overall, the change in business mix impacted VNB by EUR-18mn and had a negligible impact on NBM.

The overall impact of economic assumption fluctuations during the year was small.

Germany Health improved its model scope to include its portfolio of short term health business. The entity also implemented stochastic modeling to determine an O&G value. Given the premium adjustment mechanism used in the health business, the effect in VNB was positive.

Model improvements at Germany Life, described in chapter 3.3, offset the model changes of Germany Health.

Overall, model and assumption changes impacted VNB by EUR 2mn and NBM by -10bps.

### 3.2.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV for the German Speaking Countries increased from EUR 13,297mn to EUR 13,736mn after capital transfers of EUR 1,093mn.

Germany Life made capital transfers amounting to EUR 929mn, Germany Health EUR 103mn and Switzerland EUR 61mn. The relatively high capital transfers of Germany Life are described in chapter 3.3.

MCEV earnings were 12% of the adjusted opening EV. The increase was driven by new business and positive economic variances due to improved market conditions.

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

#### ANALYSIS OF EARNINGS OF EMBEDDED VALUE

Exhibit 14

€MN	Earr	nings on M	CEV analy	/sis
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	1,230	2,494	9,572	13,297
Foreign Exchange Variance	-5	-12	-8	-25
Acquired / Divested business	0	0	0	0
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	1,225	2,482	9,564	13,272
Value of new business at point of sale	0	0	406	406
Expected existing business contribution				
reference rate	18	0	184	201
in excess of reference rate	13	0	197	210
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	780	-12	-768	0
on new business	-239	103	136	0
Experience variance	121	-45	-93	-17
Non-economic assumption changes	0	0	108	108
Other operating variance	0	0	-360	-360
Operating MCEV earnings	693	46	-189	549
Economic variances	214	-250	1,044	1,008
Other non operating variance	0	0	0	0
Total MCEV earnings	907	-204	854	1,557
Net capital movements	-1,093	0	0	-1,093
Closing MCEV as at 31 December 2013	1,039	2,278	10,419	13,736

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Germany Life was the main driver of the German Speaking Countries' result. Germany Life is described separately in the following chapter. The other entities will be the main focus of this chapter.

The foreign exchange variance reflects the slight weakening of the Swiss Franc against the Euro during 2013. The exchange rate movement impacted EV by EUR -25mn.

Earning the reference rate on the in-force portfolio increased EV by EUR 201mn. Expected returns in excess of the reference rate increased EV by a further EUR 210mn.

The VNB at point of sale was EUR 406mn while new business strain was EUR 239mn. The relatively low new business strain is a result of Germany's business model. The topic is discussed in the Germany Life chapter.

Experience variances of EUR -17mn was the result of actual experience that deviated from what was expected. A number of experience items offset each in the entities..

Non-economic assumption changes impacted EV by EUR 108mn. The changes were driven by updated mortality, morbidity and lapse assumptions in Germany Life & Health.

Other operating variances of EUR -360mn was driven mostly by Germany Life. The model scope of Germany Health was increased to include previously unmodeled short term business. Germany Health considered, for the first time, their O&G in the determination of EV. Given the premium adjustment feature of the German health business, their O&G has a positive effect on EV. Germany Health's model changes impacted EV by EUR 158mn. Model changes in Switzerland, mainly with respect to group business crediting strategy, impacted EV by EUR 130mn.

Economic variances of EUR 1,008mn was driven by higher interest rates, lower volatilities and higher equities. Higher interest rates and narrower spreads had an impact of EUR 548mn, higher equities an impact of EUR 347mn and lower market volatilities an impact of EUR 119mn. Germany Life and Switzerland were the main contributors to the result.

#### 3.2.3 SENSITIVITIES

Exhibit 15 shows the sensitivities for the German Speaking Countries' EV and VNB.

Exhibit SENSITIVITIES 15

	Inforce N	/ICEV	New Busine	ess VNB
	EUR mn	%	EUR mn	%
Central Assumptions	13,736	100%	406	100%
Required Capital equal to local solvency capital	358	3%	19	5%
EV change by economic factors				
Risk Free Rate – 100bp	-1,316	-10%	-76	-19%
Risk Free Rate +100bp	514	4%	24	6%
Risk Free Rate – 50bp	-545	-4%	-37	-9%
Risk Free Rate +50bp	305	2%	15	4%
Charge for CNHR +100bp	-402	-3%	-20	-5%
Equity values – 20 %	-858	-6%	-12	-3%
Swaption volatilities +25%	-468	-3%	-22	-6%
Equity option volatilities +25%	-141	-1%	-9	-2%
EV change by non-economic factors				
Lapse Rates – 10 %	348	3%	31	8%
Maintenance Expenses – 10 %	216	2%	17	4%
Mortality + 15 % for products with death risk	-117	-1%	-5	-1%
Mortality – 20% for products with longevity risk	-542	-4%	-14	-3%

The portfolio is mostly participating business with long premium paying terms. Sensitivities to non-economic assumptions are relatively low because technical surplus is shared with policyholders. For the German health business, premiums adjust when assumptions change.

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on EV than rising rates. Interest rate sensitivities in 2013 are lower than those of 2012 due to higher rates and lower volatilities.

Volatility sensitivities too are lower than those of 2012 due to lower implied market volatilities.

### 3.3 Germany Life

The EV of Germany Life changed slightly from EUR 9,480mn to EUR 9,340mn. The stable result was driven by positive economic variances and relatively large capital movements.

#### 3.3.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written by Germany Life in 2013 was EUR 354mn, 15% lower than the value published in 2012. The NBM changed from 3.2% to 2.8%. Exhibit 16 presents an analysis of the change in VNB.

#### **DEVELOPMENT OF VALUE OF NEW BUSINESS**

Exhibit 16

	Value of New Business	New Business Margin	Present Value of NB Premium
	EUR mn	%	EUR mn
Reported Value as at 31 December 2012	415	3.2%	12,905
Change in Foreign Exchange	0	0.0%	0
Change in Allianz interest	0	0.0%	0
Adjusted Value as at 31 December 2012	415	3.2%	12,905
Change in volume	-17	0.0%	-585
Change in business mix	-22	-0.2%	0
Change in assumptions	-23	-0.2%	181
Value of new business as at 31 December 2013	354	2.8%	12,501

The decrease in VNB was driven by lower volumes, a change in business mix and improved modelling.

Although single premium business grew above the market average, recurring premium business declined in line with the German market. The overall decline in volumes impacted VNB by -17mn.

The change in business mix had a negative impact on VNB. The drivers of the change were the significant reduction of recurring premium business and increase of single premiums. The change in business mix impacted VNB by EUR -22mn and NBM by -20bps.

In the second half of 2013 Germany Life responded to the market with the launch of its alternative guarantee concept product "Perspektive". In December products with alternative guarantee structures already accounted for a significant portion of new business recurring premiums but, given that Perspektive was launched late in the year, it did not have a significant impact on the annual figures. The benefits of the product are expected to become evident in the VNB and margin in the coming year.

Changes to economic and non-economic assumptions had minor impacts.

Model changes were driven by the improvement to the way in which "annuity" products are modeled. The deferral and annuity phases of contracts are now modeled separately. Assumption and model changes impacted VNB by EUR -23mn and NBM by -20bps.

### 3.3.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV for Germany Life remained stable, changing from EUR 9,480mn to EUR 9,340mn after relatively large capital transfers amounting to EUR 929mn.

MCEV earnings were 8% of the opening EV. The earnings were driven by new business and positive economic variances.

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

#### ANALYSIS OF EARNINGS OF EMBEDDED VALUE

Exhibit 17

€MN	Ea	rnings on M(	CEV analysi	s
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	740	1,339	7,400	9,480
Foreign Exchange Variance	0	0	0	0
Acquired / Divested business	0	0	0	0
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	740	1,339	7,400	9,480
Value of new business at point of sale	0	0	354	354
Expected existing business contribution				
reference rate	12	0	187	199
in excess of reference rate	14	0	161	175
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	565	10	-575	0
on new business	-209	88	121	0
Experience variance	63	-27	-139	-104
Non-economic assumption changes	0	0	74	74
Other operating variance	0	0	-650	-650
Operating MCEV earnings	445	70	-467	49
Economic variances	-101		819	741
Other non operating variance	0	0	0	0
Total MCEV earnings	344	93	352	789
Net capital movements	-929		0	-929
Closing MCEV as at 31 December 2013	156	1,432	7,753	9,340

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

The VNB at point of sale was EUR 354mn with a new business strain of EUR 209mn. The new business strain is low compared to other markets and reflects the impact of Germany's open-fund business model, where new and in-force business are managed in a single fund. The structure allows for the offset of new business strain against technical profits from the in-force portfolio before profit sharing.

Earning the reference rate on the in-force portfolio increased EV by EUR 199mn. Expected returns in excess of the reference rate further increased EV by EUR 175mn.

Experience variances of EUR -104mn reflects mainly the negative impact of lower unrealized capital gains due to the implementation of the profit/loss transfer agreement, according to which the entity transfers profits to Allianz Group earlier than in the past.

Non-economic assumption changes impacted EV by EUR 74mn. The main drivers were minor revisions to mortality and morbidity assumptions.

Other operating variances of EUR-650mn was driven by a revised approach to the modeling of the going concern reserve. For future new business acquisition expenses that were previously modeled as being financed out of the policyholders' reserve (RfB), total gross profits are now taken into account for financing.

Economic variances of EUR 741mn was driven by higher interest rates, lower volatilities and higher equity values. The higher interest rates impacted EV by EUR 299mn, higher equities by EUR 339mn and lower volatilities by EUR 95mn. Change in credit spreads had a smaller impact of EUR 8mn.

A dividend of EUR 487mn with respect to 2012 was paid in the first half of 2013. In addition, a profit transfer of EUR 442mn with respect to 2013 was made at the end of the year.

This "double dividend" effect was a one-off effect observed in 2013 due to the change in timing of the capital transfer agreement to the Group.

#### 3.3.3 SENSITIVITIES

Exhibit 18 shows the sensitivities for Germany Life's EV and VNB.

SENSITIVITIES Inforce MCEV New Business VNB % FI IR mn % FI IR mn **Central Assumptions** 9,340 100% 354 100% Required Capital equal to local solvency capital 287 3% 19 5% EV change by economic factors Risk Free Rate - 100bp -1.087 -12% -70 -20% Risk Free Rate +100bp 365 4% 18 5% Risk Free Rate - 50bp -447 -5% -36 -10% Risk Free Rate +50bp 224 2% 12 3% Charge for CNHR +100bp -266 -3% -16 -4% -716 -8% -12 -4% Equity values - 20% Swaption volatilities +25% -308 -3% -22 -6% Equity option volatilities +25% -143 -2% -10 -3% EV change by non-economic factors Lapse Rates - 10% 302 3% 22 6% Maintenance Expenses - 10% 1% 13 4% Mortality + 15% for products with death -39 0% -3 -1% Mortality - 20% for products with -557 -6% -21 -6% longevity risk

Germany Life'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 EV than rising rates. Interest rate sensitivities in 2013 are lower than those of 2012 due to higher rates and lower volatilities.

Volatility sensitivities too are lower than those of 2012 due to lower implied market volatilities.

VNB is calculated using a marginal approach. New business guarantees are lower than in-force 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. New business sensitivities may behave differently to the corresponding in-force sensitivities.

### 3.4 Western & Southern Europe

The EV of Western & Southern Europe increased from EUR 7,907mn to EUR 9,376mn. The change was driven by France, Italy and Turkey.

#### 3.4.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in Western & Southern Europe in 2013 was EUR 202mn, 50% higher than the value published in 2012. The NBM increased from 1.0% to 1.2%. Exhibit 19 presents an analysis of the change in VNB.

#### **DEVELOPMENT OF VALUE OF NEW BUSINESS**

Exhibit 19

	Value of New Business	New Business Margin	Present Value of NB Premium
	EUR mn	%	EUR mn
Reported Value as at 31 December 2012	135	1.0%	12,952
Change in Foreign Exchange	0	0.0%	-10
Change in Allianz interest	0	0.0%	0
Adjusted Value as at 31 December 2012	134	1.0%	12,943
Change in volume	55	0.0%	2,397
Change in business mix	54	0.5%	0
Change in assumptions	-41	-0.3%	852
Value of new business as at 31 December 2013	202	1.2%	16,192

The change in VNB was positively impacted by changes in volume, in particular in France and Italy, and by positive development of business mix, notably in France, Italy and Belgium.

The premium increase was driven by higher group and health business in France and higher unit-linked sales in Italy. Overall, higher volumes impacted VNB by EUR 55mn.

In France, there were higher sales of more profitable group business while in Italy, the trend was towards unit-linked business. The change in business mix in Western & Southern Europe impacted VNB by EUR 54mn and NBM by 50bps.

The change in assumptions reflects mainly the lower profitability of large contracts in France that are sold with special conditions. Assumption and model changes impacted VNB by EUR -41mn and NBM by -30bps.

### 3.4.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV for Western & Southern Europe increased from EUR 7,907mn to EUR 9,376mn after capital movements of EUR 552mn. The analysis of earnings in Exhibit 20 presents the drivers of the change in MCEV. Earnings were 16% of the adjusted opening EV. The change was driven by positive market developments, in particular narrower spreads, and experience variances in France.

Italy and France are the largest entities of Western & Southern Europe. Details of their earnings are covered in later chapters.

The opening foreign exchange adjustment reflects the movement of the Turkish lira against the Euro, impacting the EV by EUR -15mn.

€MN	Fa	rnings on M	FV analysis	c		
		Earnings on MCEV analysis				
	Free Surplus	Required Capital	ViF	MCEV		
Opening MCEV reported as at 31 December 2012	-59	5,282	2,684	7,907		
Foreign Exchange Variance	-4	-2	-10	-15		
Acquired / Divested business	55	62	120	237		
Others	410	0	0	410		
Adjusted Opening MCEV as at 31 December 2012	402	5,342	2,794	8,539		
Value of new business at point of sale	-2	0	204	202		
Expected existing business contribution						
reference rate	37	0	111	148		
in excess of reference rate	182		155	337		
Transfer from VIF and required capital to free surplus						
on in-force at begin of year	740	-314	-426	0		
on new business	-725	-427	298	0		
Experience variance	15		213	250		
Non-economic assumption changes	-41	41	-123	-123		
Other operating variance	-83	50	-285	-317		
Operating MCEV earnings	124	226	148	497		
Economic variances	830	-891	952	891		
Other non operating variance	0	0	0	0		
Total MCEV earnings	954	-665	1,100	1,388		
Net capital movements	-552		0	-552		
Closing MCEV as at 31 December 2013	804	4,677	3,894	9,376		

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Model scope was extended in France to include VA business with an impact of EUR 65mn. The inclusion of the acquired business of Yapi Kredi on Turkey had an impact of EUR 172mn. These two effects are reflected in the acquired/divested business opening adjustment that amounts to EUR 237mn.

In France there was a change in the allocation of the NAV between the life and non-life entities with an impact of EUR 410mn. The impact is reflected in the other opening adjustment.

The VNB at point of sale increased to EUR 202mn with a new business strain of EUR 725mn. The most significant new business strain was incurred in France and Italy.

Earning the reference rate on the in-force portfolio increased EV by EUR 148mn. Expected returns in excess of the reference rate further increased EV by EUR 337mn.

Experience variances of EUR 250mn was driven mainly by the development of the group protection and pensions business in France.

Non-economic assumption changes impacted EV by EUR -123mn. The change was driven by higher expense and lapse assumptions in Italy. The higher expense assumptions relate to Solvency 2 projects and digital agency IT implementation.

Other operating variances of EUR -317mn was driven by model changes in France. The changes are described in the next chapter.

Economic variances of EUR 891mn was driven by narrower credit spreads in Italy, higher equities and narrower spreads in France and higher interest rates and equities in Belgium. In the region, overall, reduced spreads and lower interest rates had an impact of EUR 552mn, higher equities an impact of EUR 238mn and lower market volatilities an impact of EUR 101mn.

Net capital movements in 2013 were EUR 552mn. France paid a dividend of EUR 289mn, Italy paid EUR 195mn, Belgium 55mn and Netherlands EUR 60mn.

Greece received a capital injection of EUR 16mn. Turkey received a capital injection of EUR 11mn to fund the exclusive distribution agreement with HSBC. Luxemburg received a capital injection of EUR 20mn to fund new business.

#### 3.4.3 SENSITIVITIES

Exhibit 21 presents the sensitivities for Western & Southern Europe's EV and VNB.

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on EV than rising rates. Interest rate sensitivities in 2013 are lower than those of 2012 due to higher interest rates and lower market volatilities.

Volatility sensitivities too are lower than those of 2012 because of lower market volatilities.

€MN					
	Inforce MCEV		New Business VN		
	EUR mn	%	EUR mn	%	
Central Assumptions	9,376	100%	202	100%	
Required Capital equal to local solvency capital	38	0%	0	0%	
EV change by economic factors					
Risk Free Rate – 100bp	-493	-5%	-50	-25%	
Risk Free Rate +100bp	250	3%	25	12%	
Risk Free Rate – 50bp	-186	-2%	-23	-11%	
Risk Free Rate +50bp	138	1%	13	6%	
Charge for CNHR +100bp	-208	-2%	-15	-7%	
Equity values – 20%	-560	-6%	-31	-15%	
Swaption volatilities +25%	-144	-2%	-5	-3%	
Equity option volatilities +25%	-36	0%	-2	-1%	
EV change by non-economic factors					
Lapse Rates – 10%	67	1%	34	17%	
Maintenance Expenses – 10 %	344	4%	22	11%	
Mortality +15% for products with death risk	-147	-2%	-19	-9%	
Mortality – 20 % for products with longevity risk	-262	-3%	-3	-1%	

#### 3.5 France

The EV of France increased from EUR 4,542mn to EUR 5,351mn. The development was driven by positive experience and economic variances.

#### 3.5.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in France in 2013 was EUR 51mn, 36% lower than the value published in 2012.

DEVELOPMENT OF VALUE OF	NEW BUSINESS		Exhibit 22
€MN			
	Value of New Business	New Business Margin (%)	Present Value of NB Premium
Reported Value as at 31 December 2012	80	1.1%	7,263
Change in Foreign Exchange	0	0.0%	0
Change in Allianz interest	0	0.0%	0
Adjusted Opening Value as at 31 December 2012	80	1.1%	7,264
Change in volume	15	0.0%	827
Change in business mix	25	0.4%	0
Change in assumptions	-68	-0.9%	270
Value of new business as at 31 December 2013	51	0.6%	8,361

Although new business premium volumes were higher, the change in crediting strategy and relatively low profitability of large contracts with special conditions resulted in the decrease in VNB and NBM.

The increase in premium volumes was mainly with respect to recurring premium group business and partnerships. The change in volume impacted VNB by EUR 15mn.

The change in business mix was driven by the increase in group business and higher loadings on individual life products. The change impacted VNB by EUR 25mn and NBM by 40bps.

Change in assumptions was driven by revised crediting strategy, updated group business loss ratios and the negative effect of the lower profitability of large contracts that are sold with special conditions. The change impacted VNB by EUR -68mn and NBM by -90bps.

### 3.5.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV of France increased from EUR 4,542mn to EUR 5,351mn after a dividend payment of EUR 289mn.

MCEV earnings were 12% of the adjusted opening EV. The change was driven by positive experience and economic variances.

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

Exhibit 23

ANALYSIS OF EARNINGS OF EMBEDDED VALUE

Other non operating variance

Closing MCEV as at 31 December 2013

Total MCEV earnings

Net capital movements

€ MN

€IMIN	Earnings on MCEV analysis			S
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	241	1,738	2,562	4,542
Foreign Exchange Variance	0	0	0	0
Acquired / Divested business	20	40	5	65
Others	410	0	0	410
Adjusted Opening MCEV as at 31 December 2012	671	1,778	2,567	5,017
Value of new business at point of sale	0	0	51	51
Expected existing business contribution				
reference rate	14	0	53	67
in excess of reference rate	39	0	123	162
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	298	-57	-240	0
on new business	-406	208	199	0
Experience variance	132	-8	122	246
Non-economic assumption changes	7	-7	44	44
Other operating variance	-15	-16	-268	-299
Operating MCEV earnings	67	119	85	272
Economic variances	132	-4	224	351

Acquired/divested business reflects the inclusion of VA business with an impact of EUR 65mn.

200

-289

582

115

0

1,893

308

0

2,876

623

-289

5,351

In France there was a change in the allocation of the NAV between the life and non-life entities with an impact of EUR 410mm. The other opening adjustment reflects this change.

The VNB at point of sale was EUR 51mn with a new business strain of EUR 406mn.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Earning the reference rate on the in-force portfolio increased EV by EUR 67mn. Expected returns in excess of the reference rate further increased EV by EUR 162mn.

Experience variances of EUR 246mn reflects the development of the group protection and pensions business.

Non-economic assumption changes of EUR 44mn reflects updated demographic assumptions.

Other operating variances of EUR -299mn reflects model changes concerning profit sharing on group protection contracts and data true-ups.

Economic variances of EUR 351mn reflects improved markets. Higher equities had an impact of EUR 200mn, higher interest rates an impact of EUR 27mn and narrower spreads an impact of EUR 124mn.

#### 3.5.3 SENSITIVITIES

Exhibit 24 shows the sensitivities for France's EV and VNB.

	Inforce MCEV		New Business VNB	
	EUR mn	%	EUR mn	%
Central Assumptions	5,351	100%	51	100%
Required Capital equal to local solvency capital	0	0%	0	0%
EV change by economic factors				
Risk Free Rate – 100bp	-45	-1%	-41	-80%
Risk Free Rate +100bp	35	1%	25	48%
Risk Free Rate – 50bp	-9	0%	-20	-40%
Risk Free Rate +50bp	16	0%	12	24%
Charge for CNHR +100bp	-155	-3%	-9	-18%
Equity values – 20 %	-281	-5%	-8	-16%
Swaption volatilities +25%	7	0%	0	0%
Equity option volatilities +25%	4	0%	0	0%
EV change by non-economic factors				
Lapse Rates – 10 %	49	1%	24	47%
Maintenance Expenses – 10 %	208	4%	13	25%
Mortality + 15 % for products with death risk	-76	-1%	-12	-23%
Mortality – 20% for products with longevity risk	-235	-4%	-2	-5%

Interest rate sensitivities in 2013 are lower than those of 2012 due to higher interest rates and lower market volatilities.

Volatility sensitivities too are lower than those of 2012 because of lower market volatilities.

### 3.6 Italy

The EV of Italy increased from EUR 2,025mn to EUR 2,415mn. The change was driven by new business and positive economic variances.

#### 3.6.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in Italy in 2013 increased to EUR 100mn, 117% higher than the value published in 2012. The NBM increased from 1.0% to 1.7%. Exhibit 25 presents an analysis of the change in VNB.

DEVELOPMENT OF VALUE OF  € MN	- NEW BOSINESS		Exhibit 25
€ IVIN	Value of New Business	New Business Margin (%)	Present Value of NB Premium
Reported Value as at 31 December 2012	46	1.0%	4,666
Change in Foreign Exchange	0	0.0%	0
Change in Allianz interest	0	0.0%	0
Adjusted Opening Value as at 31 December 2012	46	1.0%	4,666
Change in volume	37	0.0%	1,352
Change in business mix	16	0.7%	0
Change in assumptions	1	0.0%	7
Value of new business as at 31 December 2013	100	1.7%	6,026

The increase in VNB was driven by higher volumes and a positive development of the business mix.

Sales of the new unit-linked DARTA "Progetto Reddito" product were successful. Promotion of the existing CreditRAS unit-linked range of products was successful too. The increase in volume impacted VNB by EUR 37mn.

Italy continued its shift to sales of business with low or no guarantees. The margins of Progetto Reddito and the unit-linked range of CreditRAS are relatively high because the products feature no underlying guarantees. The good sales had a positive impact on business mix. The change in business mix in 2013 impacted VNB by EUR 16mn and NBM by 70bps.

Small changes to lapse assumptions impacted VNB by EUR 1mn. Look-through profits, not included in the VNB, were EUR 34mn. The look-through profits were driven by the inclusion of profits generated by PIMCO and Allianz Bank, Allianz owned firms, in the management of funds for CreditRAS and DARTA.

### 3.6.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV of Italy increased from EUR 2,025mn to EUR 2,415mn after a dividend payment of EUR 195mn.

MCEV earnings were 29% of the opening EV. The change was driven by new business and the narrowing of spreads between Italian government bond and swap rates.

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

€ MN		Earning	s on MCEV	′ analvsis
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	44	2,192	-212	2,025
Foreign Exchange Variance	0	0	0	0
Acquired / Divested business	0	0	0	0
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	44	2,192	-212	2,025
Value of new business at point of sale	0	0	100	100
Expected existing business contribution				
reference rate	13	0	33	46
in excess of reference rate	128	0	5	134
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	288	-162	-126	0
on new business	-211	134	77	0
Experience variance	-27		9	16
Non-economic assumption changes	0	0	-104	-104
Other operating variance	-2	0	-1	-3
Operating MCEV earnings	191	5	-7	189
Economic variances	332	-548	612	396
Other non operating variance	0		0	0
Total MCEV earnings	522	-543	605	584
Net capital movements	-195		0	-195
Closing MCEV as at 31 December 2013	372	1,649	394	2,415

The VNB at point of sale increased significantly to EUR 100mn while new business strain decreased slightly to EUR 211mn.

Earning the reference rate on the in-force portfolio increased EV by EUR 46mn. Expected returns in excess of the reference rate further increased EV by EUR 134mn.

Experience variances of EUR 16mn reflects a small deviation from expected experience.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Non-economic assumption changes of EUR -104mn reflects mainly the increase of expense assumptions with respect to Solvency 2 projects and digital agency IT implementation. Higher expenses of external asset management services were also taken into account.

Higher lapse assumptions, in particular at Allianz S.p.A., had a negative impact.

The economic variances of EUR 396mn was driven by narrower Italian government bond spreads.

The widened spreads on Italian government bond rates reduced by around 100bps by the end of the year. This resulted in higher unrealized gains in the segregated funds and thus higher fund returns, which had a positive impact on EV.

The reduction in spreads had an impact of EUR 242mn, the decrease in volatilities EUR 101mn and the increase in interest rates EUR 53mn.

#### 3.6.3 SENSITIVITIES

Exhibit 27 shows the sensitivities for Italy's EV and VNB.

	Inforce MCEV		New Business VNE	
	EUR mn	%	EUR mn	%
Central Assumptions	2,415	100%	100	100%
Required Capital equal to local solvency capital	36	1%	0	0%
EV change by economic factors				
Risk Free Rate – 100bp	-370	-15%	-3	-3%
Risk Free Rate +100bp	168	7%	-4	-4%
Risk Free Rate – 50bp	-145	-6%	0	0%
Risk Free Rate +50bp	98	4%	-2	-2%
Charge for CNHR +100bp	-27	-1%	-3	-3%
Equity values – 20 %	-179	-7%	-17	-17%
Swaption volatilities +25%	-134	-6%	-5	-5%
Equity option volatilities +25%	-31	-1%	-1	-1%
EV change by non-economic factors				
Lapse Rates – 10 %	-15	-1%	6	6%
Maintenance Expenses – 10 %	80	3%	5	5%
Mortality +15% for products with death risk	-29	-1%	-5	-5%
Mortality – 20% for products with longevity risk	-20	-1%	0	0%

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on EV than rising rates. Interest rate sensitivities in 2013 are lower than those of 2012 due to higher interest rates and lower market volatilities.

Volatility sensitivities too are lower than those of 2012 due to lower market volatilities.

#### 3.7 Iberia & Latin America

The EV of Iberia & Latin America increased from EUR 307mn to EUR 798mn. The change was driven by positive economic variances.

#### 3.7.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in Iberia & Latin America in 2013 increased to EUR 55mn, 14% higher than the value published in 2012. The NBM changed from 3.8% to 3.5%. Exhibit 28 presents an analysis of the change in VNB.

DEVELOPMENT OF VALUE OF	NEW BUSINESS		Exhibit 28
€MN			
	Value of New Business	New Business Margin (%)	Present Value of NB Premium
Reported Value as at 31 December 2012	48	3.8%	1,276
Change in Foreign Exchange	0	0.0%	-4
Change in Allianz interest	0	0.0%	0
Adjusted Opening Value as at 31 December 2012	48	3.8%	1,273
Change in volume	4	0.0%	232
Change in business mix	6	0.2%	-49
Change in assumptions	-3	-0.5%	110
Value of new business as at 31 December 2013	55	3.5%	1,566

The increase in VNB was driven by higher new business volumes in Mexico and positive development of the business mix in Spain.

In Mexico the new business was mostly higher margin unit-linked products. The higher new business volumes impacted VNB by FUR 4mn

In Spain the reduction of guarantees and re-pricing of savings products had a positive impact on business mix. Increased sales of mortgage protection business were also reported. The change impacted VNB by EUR 6mn and NBM by 20bps.

The change in assumptions reflects the change in economic assumptions each quarter and updated lapse and expense assumptions in Spain. Change in assumptions impacted VNB by EUR -3mn and NBM by -50bps.

### 3.7.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV for Iberia & Latin America increased from EUR 307mn to EUR 798mn after dividend payments of EUR 36mn. The analysis of earnings in Exhibit 29 presents the drivers of the change in EV.

€MN				
€ IVIIV	Earnings on MCEV analysis			
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	-963	1,562	-292	307
Foreign Exchange Variance	-3	-1	-2	-6
Acquired / Divested business	-14	0	21	7
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	-980	1,561	-273	309
Value of new business at point of sale	3	0	52	55
Expected existing business contribution				
reference rate	6	0	10	16
in excess of reference rate	0	0	1	1
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	43	-1	-42	0
on new business	-99	68	30	0
Experience variance	1		49	50
Non-economic assumption changes	0	1	34	35
Other operating variance	-3	3	48	48
Operating MCEV earnings	-49	72	182	205
Economic variances	492	-466	294	320
Other non operating variance	0	0	0	0
Total MCEV earnings	443	-394	476	525
Net capital movements	-36			-36
Closing MCEV as at 31 December 2013	-573	1,167	204	798

MCEV earnings were 170% of the adjusted opening EV. The change was driven by positive economic variances.

Opening FX variance reflects the slight weakening of the Mexican Peso against the Euro, impacting the EV by EUR -6mn.

A further opening adjustment of EUR 7mn reflects the acquisition of Pastor Vida in the second half of the year.

The VNB at point of sale increased to EUR 55mn with a new business strain of EUR 99mn.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

Earning the reference rate on the in-force portfolio increased EV by EUR 16mn. Expected returns in excess of the reference rate further increased EV by EUR 1mn.

Experience variances of EUR 50mn was driven by higher than expected lapses on older business with high guarantees and lower than expected mortality in Spain.

Non-economic assumption changes impacted EV by EUR 35mn. The change was driven by updated lapse assumptions and lower corporate tax rate in Portugal.

Other operating variances of EUR 48mn reflects the change in investment strategy in Spain. The change aligns with their de-risking strategy.

Economic variances of EUR 320mn was driven by reduced credit spreads in Spain.

In Spain, Popular paid a dividend of EUR 22mn while Seguros Life paid EUR 14mn. Neither Portugal nor Mexico paid dividends.

#### 3.7.3 SENSITIVITIES

Exhibit 30 presents the sensitivities for Iberia & Latin America's EV and VNB.

Exhibit

	Inforce N	<b>ICEV</b>	New Busine	ess VNB
	EUR mn	%	EUR mn	%
Central Assumptions	798	100%	55	100%
Required Capital equal to local solvency capital	98	12%	5	9%
EV change by economic factors				
Risk Free Rate – 100bp	-7	-1%	10	18%
Risk Free Rate +100bp	-7	-1%	-11	-19%
Risk Free Rate – 50bp	-1	0%	5	9%
Risk Free Rate +50bp	-2	0%	-6	-10%
Charge for CNHR +100bp	-29	-4%	-3	-5%
Equity values – 20 %	-7	-1%	0	0%
Swaption volatilities +25%	-10	-1%	-1	-1%
Equity option volatilities +25%		0%	0	0%
EV change by non-economic factors				
Lapse Rates – 10 %	36	5%	7	13%
Maintenance Expenses – 10 %	23	3%	-1	-3%
Mortality + 15% for products with death risk	-59	-7%	-9	-17%
Mortality – 20 % for products with longevity risk	-136	-17%	-9	-16%

Interest rate sensitivities in 2013 are lower than those of 2012 due to higher interest rates and lower market volatilities.

Volatility sensitivities are lower than those of 2012 because of decreased market volatilities.

Non-economic sensitivities are higher than in other entities, driven by the risk products in Spain and Portugal.

Mexico's investment products tend to be lapse protected by their charging structure but are more exposed to interest rate shocks.

#### 3.8 Growth Markets

The EV of the Growth Markets increased from EUR 1,505mn to EUR 1,646mn. The change was driven by new business and positive economic variances.

#### 3.8.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in the Growth Markets in 2013 was EUR 166mn, 16% lower than the value published in 2012. The NBM changed from 3.2% to 3.0%. Exhibit 31 presents an analysis of the change in VNB.

DEVELOPMENT OF VALUE OF NEW BUSINESS Ext				
	Value of New Business	New Business Margin	Present Value of NB Premium	
	EUR mn	%	EUR mn	
Reported Value as at 31 December 2012	196	3.2%	6,082	
Change in Foreign Exchange	-9	0.0%	-214	
Change in Allianz interest	1	0.0%	-4	
Adjusted Value as at 31 December 2012	188	3.2%	5,863	
Change in volume	-7	0.0%	-263	
Change in business mix	3	0.1%	3	
Change in assumptions	-18	-0.3%	-118	
Value of New Business as at 31 December 2013	166	3.0%	5,485	

The change in foreign exchange was driven mainly by the change in most of the Asian currencies against the Euro. The Indonesian Rupiah in particular depreciated significantly during 2013.

The change in group share reflects the increased share in Slovakia and decreased share in Malaysia during the year.

New business premium volumes declined in Asia and the CEEMA regions. In Asia the decrease was most evident in Indonesia with the loss of the Danamon bancassurance business. New business growth in Taiwan however had a positive impact. Overall, the decrease in volume in the Growth Markets impacted VNB by EUR-7mn.

In Poland unprofitable short term savings and credit insurance products were withdrawn. This had a positive impact on business mix. A higher proportion of relatively low margin single premium business in Indonesia however had a negative impact on their margin. The overall change in business mix in the Growth Markets impacted VNB by EUR 3mn and NBM by 10bps.

The change in non-economic assumptions in Korea was a main driver of the change of assumptions in the Growth Markets. Expense assumptions were revised in the context of lower than expected sales volumes. The change in assumptions impacted VNB by EUR -18mn and NBM by -30bps.

### 3.8.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV for the Growth Markets increased from EUR 1,505mn to EUR 1,646mn after net capital movements of EUR 8mn.

MCEV earnings were 20% of the adjusted opening EV. The change was driven by new business and positive economic variances.

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

#### ANALYSIS OF EARNINGS OF EMBEDDED VALUE

Exhibit 32

€MN	E	arnings on M	ICEV analys	is
		Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	-979	2,862	-378	1,505
Foreign Exchange Variance	42	-165	-7	-129
Acquired / Divested business	-36	-1	27	-9
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	-973	2,697	-357	1,367
Value of new business at point of sale	-38	0	204	166
Expected existing business contribution				
reference rate	49	0	52	101
in excess of reference rate	-1	0	12	11
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	314	-128	-186	0
on new business	-219	86	133	0
Experience variance	-33	22	-4	-14
Non-economic assumption changes	45	-45	-138	-138
Other operating variance	-239	240	43	44
Operating MCEV earnings	-122	175	117	169
Economic variances	90	-273	286	102
Other non operating variance	0	0	0	0
Total MCEV earnings	-33	-99	402	271
Net capital movements	8		0	8
Closing MCEV as at 31 December 2013	-997	2,599	45	1,646

The foreign exchange variance reflects a general strengthening of the Euro against the Asian and CEEMA currencies. The movement against the Indonesian Rupiah was particularly strong. The change in foreign exchange rates impacted EV by EUR -129mn.

A further adjustment of EUR -9mn reflects the transfer of the variable annuity book from Global Life to France with an impact of EUR -65mn, the inclusion of the business in Lebanon with an impact of EUR 55mn, the acquisition of business in Taiwan with an impact of

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

EUR 2mn and a decrease in Group share in Malaysia with an impact of EUR -1mn.

The VNB at point of sale was EUR 166mn with a new business strain of EUR 219mn. The acquisition expense overruns were driven by lower than expected sales in China and South Korea.

Earning the reference rate on the in-force portfolio increased EV by EUR 101mn. Expected returns in excess of the reference rate further increased EV by EUR 11mn.

Experience variances of EUR -14mn was mainly driven by the one-off restructuring provision for the early retirement program in Korea. This was slightly offset by a participating fund adjustment in China.

Non-economic assumption changes impacted EV by EUR -138mn. The changes were driven by new upfront distribution fees in Indonesia, Taiwan and Malaysia that had an impact of EUR -53mn, assumption changes in Korea, most with respect to maintenance expenses, that had an impact of EUR -47mn and demographic assumption changes in Slovakia that had an impact of EUR -41mn.

Other operating variances of EUR 44mn reflects mainly changes to ReC modelling in South Korea and Taiwan.

Economic variances of EUR 102mn was driven by the higher yield curve in South Korea. This was however offset by longer term rates in Taiwan. In the region, overall, higher intererst rates had an impact of EUR 54mn, lower volatilities an impact of EUR 42mn and higher equities an impact of EUR 6mn.

Japan and Taiwan received capital injections of EUR 6mn and EUR 43mn respectively.

#### 3.8.3 SENSITIVITIES

Exhibit 33 presents the sensitivities for the Growth Markets' EV and VNB.

SENSITIVITIES Exhibit 33

	Inforce N	<b>ICEV</b>	New Busine	ess VNB
	EUR mn	%	EUR mn	%
Central Assumptions	1,646	100%	166	100%
Required Capital equal to local solvency capital	94	6%	3	2%
EV change by economic factors				
Risk Free Rate – 100bp	-650	-39%	-15	-9%
Risk Free Rate +100bp	378	23%	-2	-1%
Risk Free Rate – 50bp	-284	-17%	-6	-4%
Risk Free Rate +50bp	216	13%	-1	-1%
Charge for CNHR +100bp	-115	-7%	-8	-5%
Equity values – 20%	-86	-5%	0	0%
Swaption volatilities +25%	-12	-1%	-1	-1%
Equity option volatilities +25%	-21	-1%	-1	0%
EV change by non-economic factors				
Lapse Rates – 10 %	66	4%	20	12%
Maintenance Expenses – 10 %	110	7%	13	8%
Mortality + 15% for products with death risk	-115	-7%	-12	-7%
Mortality – 20% for products with longevity risk	-128	-8%	0	0%

Sensitivities to interest rates are driven by the high guarantees in the old-block of traditional portfolios in South Korea and Taiwan.

Due to the asymmetric nature of embedded options and guarantees, falling market rates have a higher impact on EV than rising rates.

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

#### 3.9 USA

The EV of USA increased from EUR 4,757mn to EUR 5,303mn. The increase was by strong new business and expected existing business contribution.

#### 3.9.1 DEVELOPMENT OF VALUE OF NEW BUSINESS

The VNB written in the USA in 2013 increased significantly to EUR 219mn, 397% higher than the value published in 2012. The NBM increased from 0.6% to 3.0%. Exhibit 34 presents an analysis of the change in VNB.

€MN			
	Value of New Business	New Business Margin	Present Value of NB Premium
	EUR mn	%	EUR mn
Reported Value as at 31 December 2012	44	0,6%	7,212
Change in Foreign Exchange	0	0.0%	-124
Change in Allianz interest	0	0.0%	0
Adjusted Opening Value as at 31 December 2012	44	0.6%	7,089
Change in volume	-1	0.0%	191
Change in business mix	84	1.1%	0
Change in assumptions	93	1.3%	0
Value of New Business as at 31 December 2013	219	3.0%	7,279

The increase in VNB was driven by early management response to difficult market conditions. Product re-pricing and a positive turn in the markets led to a healthy development of margin during the year.

Movements of the US Dollar during the course of the year had a negligible impact on VNB.

Change in new business volumes had a small impact of EUR -1mn.

Change in business mix reflects early management response to the challenging market in the first half of the year. Re-pricing of the fixed index and variable annuity lines had a positive impact on business mix. Sales of fixed annuity products with relatively high margins were promoted, which resulted in especially increased new business volumes in the second half of the year. The change in business mix impacted VNB by EUR 84mn and NBM by 110bps.

The change in assumptions reflects mainly the increase in interest rates and much lower swaption volatilities. The changes impacted VNB by EUR 93mn and NBM by 130bps.

### 3.9.2 DEVELOPMENT OF EMBEDDED VALUE AND FREE SURPLUS

The EV of USA increased from EUR 4,757mn to EUR 5,303mn after a dividend payment of EUR 472mn.

MCEV earnings were 27% of the adjusted opening EV. The earnings were driven by new business and the expected existing business contribution.

The analysis of earnings in Exhibit 35 presents the drivers of the change in EV.

NALYSIS OF	EARNINGS O	F EWREDDED	VALUE	Ė		

Exhibit 35

€MN				
	Ea:	rnings on MO	CEV analysis	S
	Free Surplus	Required Capital	ViF	MCEV
Opening MCEV reported as at 31 December 2012	680	3,651	425	4,757
Foreign Exchange Variance	-29	-158	-18	-206
Acquired / Divested business	0	0	0	0
Others	0	0	0	0
Adjusted Opening MCEV as at 31 December 2012	651	3,494	407	4,551
Value of new business at point of sale	3	0	216	219
Expected existing business contribution				
reference rate	38		227	265
in excess of reference rate	416	0	259	675
Transfer from VIF and required capital to free surplus				
on in-force at begin of year	315	-241	-74	C
on new business	-307	264	43	C
Experience variance			56	56
Non-economic assumption changes	0	0	-98	-98
Other operating variance	4		25	29
Operating MCEV earnings	468	23	654	1,146
Economic variances	-283	-230	591	78
Other non operating variance	0		0	0
Total MCEV earnings	186	-207	1,245	1,224
Net capital movements	-472		0	-472
Closing MCEV as at 31 December 2013	365	3,287	1,652	5,303

The opening foreign exchange adjustment reflects the weakening of the US Dollar against the Euro. The currency movement impacted EV by EUR -206mn.

The VNB at point of sale increased significantly to EUR 219mn while new business strain increased slightly to EUR 307mn.

Earning the reference rate on the in-force portfolio increased EV by EUR 265mn. Expected returns in excess of the reference rate, main-

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

ly the realization of expected corporate spreads during the year, further increased EV by EUR 675mn.

Experience variances of EUR 56mn was driven by positive annuitization and lapse variances on the fixed annuity business.

Non-economic assumption changes of EUR -98mn reflects the annual update of lapse and maintenance expense assumptions.

Other operating variances of EUR 29mn was driven mainly be changes made to investment and crediting strategies.

Economic variances of EUR 78mn was driven by the narrowing of credit spreads and higher interest rates that had an impact of EUR 54mn. Lower market volatilities had an impact of EUR 15mn and higher equities an impact of EUR 9mn.

The decrease in FS was driven by the relatively high dividend payment.

#### 3.9.3 SENSITIVITIES

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Exhibit 36 shows the sensitivities for the USA EV and VNB. Most sensitivities align with those of 2012. Those that do not are discussed below..

Evhibit 26

CANA						
€MN	Inforce N	Inforce MCEV		New Business VNB		
	EUR mn	%	EUR mn	%		
Central Assumptions	5,303	100%	219	100%		
Required Capital equal to local solvency capital	159	3%	19	9%		
EV change by economic factors						
Risk Free Rate – 100bp	45	1%	12	6%		
Risk Free Rate +100bp	-163	-3%	-14	-6%		
Risk Free Rate – 50bp	42	1%	6	3%		
Risk Free Rate +50bp	-71	-1%	-7	-3%		
Charge for CNHR +100bp	-77	-1%	-6	-3%		
Equity values – 20 %	-125	-2%	-6	-3%		
Swaption volatilities +25%	-43	-1%	1	1%		
Equity option volatilities +25%	-393	-7%	-23	-11%		
EV change by non-economic factors						
Lapse Rates – 10 %	19	0%	5	2%		
Maintenance Expenses – 10 %	97	2%	7	3%		
Mortality + 15% for products with death risk	-19	0%	-1	0%		
Mortality – 20 % for products with longevity risk	-230	-4%	-12	-6%		

Equity volatility sensitivities in 2013 are lower due to the significant decrease in equity volatilities since 2012.

Interest rate sensitivities have switched signs since 2012. Interest rates have increased and different lines of business respond differ-

ently to the increase in rates. An interest rate up-shock on fixed annuities has a negative impact that is more significant for the 2013 results.

Change of business mix has a positive effect on the lapse sensitivity.

### 3.10 Holding

The Holding EV reflects the results of internal reinsurance and the holding expense adjustment. Exhibit 37 summarizes the impact of these adjustments.

SUMMARY HOLDING			Exhibit 37
€MN			
	Impact of Holding Expense	Reinsurance	Total
Embedded Value 2012	-620	151	-469
Embedded Value 2013	-521	153	-367
Value of New Business 2012	-107	20	-87
Value of New Business 2013	-111	15	-96

#### **Holding Expenses**

While total Holding expenses increased by just 1.2% compared to 2012, the holding expenses allocated to the life segment decreased by 17.5% as the allocation to the life segment was significantly lower. The lower after-tax life segment holding expenses resulted in an increase in EV and VNB. Further, the higher interest rates and the resulting higher discounting of future maintenance expenses led to a smaller impact of the present value of the holding expenses on the EV and VNB.

#### Reinsurance

The reinsurance EV increased slightly, mainly driven by the VNB offset by a decrease due to economic assumptions mostly from higher discount rates. The negative effect of setting the NAV of the entity covering traditional reinsurance to zero had a negative effect. This was done as all assets are held outside of the entity. VNB decreased in 2013 due to lower premium production in the Asia-Pacific branch.

- 2 Introduction
- 3 Overview of results
- 14 Regional analysis of embedded value
- 35 Independent Opinion

### **Independent Opinion**

KPMG has been engaged to review the Market Consistent Embedded Value (MCEV) of Allianz Group, Munich, as at 31 December 2013 as stipulated in the MCEV Principles published by the CFO forum in June 2008 and amended in October 2009 (MCEV Principles) as described in the accompanying MCEV Report of Allianz Group. Management is responsible for the preparation of the MCEV Report including the calculation of the MCEV. This includes particularly setting the operative and economic assumptions, the explanation concerning the determination of the MCEV and its roll forward, the implementation and the operativeness of the system which ensures the completeness and correctness of the data which are necessary for the calculation of the MCEV.

KPMG's responsibility is to express an opinion on the calculation of the MCEV based on review procedures. Assessment criteria for this opinion are the MCEV Principles.

We conducted our review of the MCEV in accordance with IDW PS 570. This standard requires that we plan and conduct the review so that we can preclude through critical evaluation, with a certain level of assurance, that the MCEV report – the methodology and assumptions used, the calculation and further information – has not been prepared in material aspects in accordance with the requirements of the MCEV Principles. A review is limited primarily to inquiries of company employees and analytical assessments and therefore does not provide the assurance attainable in a MCEV audit.

The calculation of the MCEV is subject to numerous assumptions on future conditions and events which are uncertain and beyond control of the company. Therefore the actual future cashflows might differ significantly from those underlying the MCEV report.

Based on our review no matters have come to our attention that causes us to presume that the MCEV report has not been prepared in material respects in accordance with the MCEV Principles.

Munich, 13th March 2014

KPMG AG Wirtschaftsprüfungsgesellschaft

Dr. Peter Ott Dr. Thorsten Wagner

# **APPENDIX**

**Glossary and Abbreviations** 

Pages **38–51** 

38	Methodology
38	A.1 Definitions
38	A.2 Net asset value
38	A.3 Required capital
39	A.4 Value of in-force covered business
39	A.4.1 Present value of future profits
39	A.4.2 Time value of options and guarantees
40	A.4.3 Cost of residual non-hedgeable risk
40	A.4.4 Frictional cost of required capital
40	A.5 New business
41	A.6 Participating business
41	A.7 Health business
41	A.8 Look through adjustments
42	Assumptions
42	B.1 Economic assumptions
47	B.2 Capital charge for cost of residual non-hedgeable risk
47	B.3 Foreign currency exchange rates
47	B.4 Non-economic assumptions
48	B.5 Tax assumptions
48	B.6 Real-world economic assumptions
49	Disclaimer

37

# Appendix A: Methodology

Allianz Group provides the operating entities with detailed guidelines in order to ensure consistency of EV 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 reviewed and approved by the local chief actuaries and CFOs.

## 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 making 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.

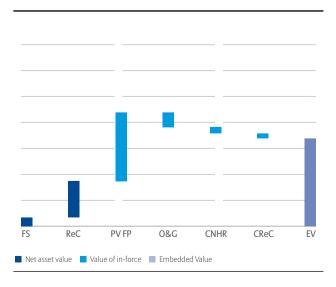
The EV can be broken down into the net asset value ("NAV"), i.e. the value of the assets not backing liabilities, and the value of in-force business ("VIF"), i.e. the value of future profits emerging from operations and assets backing liabilities.

The NAV is defined as:

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

The VIF is defined as:

- The present value of future profits from in-force business ("PVFP"), after allowance for:
  - The time value of financial options and guarantees ("O&G"),
  - The cost of residual non-hedgeable risks ("CNHR"), and
  - The frictional cost of required capital ("CReC").



## A.2 Net asset value

NAV is the market value of the assets not backing local statutory reserves at 31 December 2013, net of an allowance for tax on unrealized capital gains. The NAV includes the ReC, i.e. the amount of capital required to support in-force business in excess of local statutory reserves, and FS, i.e. the market value of any capital allocated to, but not required to support, the in-force business at the valuation date.

## A.3 Required capital

Allianz defines required capital 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.

Required capital derived from the internal risk capital model is defined as [risk capital - (PVFP - O&G - CNHR)].

The internal risk capital in Allianz Group is defined as 130% of the maximum loss of MCEV that shareholders may experience under adverse conditions over a time horizon of one year with a confidence interval of 99.5%. The 130% capitalization target and 99.5% confidence interval reflect the Group's target rating of AA. Risk capital is held to protect against insolvency from the point of view of the economic balance sheet over a 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.

To quantify internal risk capital for life insurance operations, the risk universe is first broken down into market, credit, actuarial, business and operational risks. These are further decomposed into single risk drivers and sub risk drivers. For each risk driver stand-alone capital is defined that is based on the change in MCEV under worst case shock conditions of that 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 per risk category and then further aggregated to a fund level. Diversification between non-financial risks, between financial risks and between covered entities within MCEV scope is allowed for. When ReC is derived from the internal RC model, diversification between financial and non-financial risks is allowed for, otherwise not. Diversification is not allowed for between covered and non-covered entities.

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

Generally, the economic capital requirement is monitored and met for each entity, however in exceptional situations, individual companies or segments may not be fully capitalized beyond local solvency levels. This means that risk capital requirements may be higher than MCEV on a local or segment 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 in-force covered business

The VIF of covered business is defined as the PVFP from in-force covered business after allowance for O&G, CNHR and 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 in-force portfolio.

Following the market consistent approach the "certainty equivalent" method is applied, whereby it is assumed that all assets earn the reference rate and all cash-flows are discounted using the reference rate.

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

O&G 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 sce-

narios to determine a stochastic PVFP. O&G is then calculated as the difference between the certainty equivalent and the average of stochastic PVFPs.

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.

The entities maintain an asset-liability interaction tool which is used for the stochastic simulations for O&Gs and also for the calculation of risk capital. An important part of this tool is the modelling of investment 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 major 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, for example between terminal dividends and 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. Modelling simplifications are evaluated.

The valuation of guaranteed surrender, extension and conversion options requires modelling 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 risks which are not already allowed for in the O&G or in the deterministic PVFP. In addition to the hedgeable financial risk captured in the O&G, allowance needs to be made for non-financial risks, for non-hedgeable financial risk and for operational risk, where both symmetric and asymmetric risks need to be considered.

Allianz applies a cost of capital approach so that CNHR 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, morbidity, lapse, expense and operational risks. Diversification between these risks is taken into account. It is based on a 99.5% percentile multiplied by a capitalization target of 130% as required by Allianz target rating of AA for our internal model, to which we apply a capital charge (see Appendix B.2).

Non-financial risk capital allows for an average diversification of covered risks. This covers diversification between non-financial risk types. Diversification does not include effects between financial and non-financial risk types and between 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 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 and operational risk.

#### A.4.4 FRICTIONAL COST OF REQUIRED CAPITAL

The cost of holding the ReC consists 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.

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 in-force 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 in-force by the new policies. It is calculated as the present value of future profits after acquisition expense over- and underruns and tax ("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 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 business in the USA, where products are re-priced 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 VNB. Premiums are before reinsurance.

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 in-force business. In Germany and France for example due to regulatory profit sharing rules initial expenses can be shared with all policyholders of the in-force fund, so the shareholder strain from new business is reduced significantly. Furthermore, in order to capture the impact on the O&G 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.

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

## 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 in-force value.

is approximately EUR 809mn as at 31 December 2013, driven mainly by Germany Life. This additional value has not been included in the MCEV figures.

The total value of look-through adjustments on an MCEV basis

## 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 in-force policies is applied.
- Investment income on assets backing ReC 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.

# **Appendix B: Assumptions**

# B.1 Economic assumptions

The EV results for 2013 are based on economic market conditions as of 30 December 2013.

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 performed by Allianz SE. Stochastic economic scenarios are then generated centrally by an application provided by Barrie & Hibbert.

Key economic assumptions for risk-neutral evaluation are for each 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, Bloomberg and Tullett Prebon data. Market data used for calibration of volatilities have been taken from Reuters and Bloomberg where available and sufficiently liquid. Correlations and volatilities for real estate are based on historical data.

Reference rate yield-curves used in the certainty equivalent approach and the stochastic scenarios are based on swap rates as at 30 December 2013 with the following further steps.

In line with EIOPA guidance for Solvency 2 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 EV 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: maximum (0; 50% × (corporate spread over swap – 40bps)), 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 Markit 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 ("indirect approach"). The latter would be the approach used for QIS 5, however, we observed distortions from different government bond

baskets in the two steps with increasing government bond spreads in some countries, and therefore, 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, CNY and MYR we assumed similar illiquidity premiums in line with the EIOPA guidance for QIS 5.

We applied the illiquidity premium in line with EIOPA guidance. Table 2 shows the term structure of the illiquidity premium for each currency. The illiquidity premium does not run down completely because it is added to the forward curve rather than the swap curve. The amounts shown for illiquidity premiums are relative to swaps rates. When measured against the swap credit risk adjusted swap curve, the base illiquidity premium would be 10bps higher.

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 USA fixed and fixed indexed annuities.

We have also 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 South Korea reference rates are based on government rates as due to systematic distortions in the South 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. For EUR, for example, 20 years was used as the extrapolation entry point.

Allianz has 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. The entry points and ultimate forward rates for each currency are shown below in table 3.

For consistency, yield-curve extrapolation is applied in sensitivities to interest rate shifts. This means that only the deep and liquid part of the 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.

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

Due to the introduction of the 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. We applied consistent reference rate assumptions to both the deterministic and stochastic runs, in order to better the accuracy of the calculation of the intrinsic and time value of O&G's. 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. The EV of these entities is less than 1% of the total EV.

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

#### SWAP RATES | TABLE 1

		1 year	2 year	5 year	10 year	20 year
Currency	as of dd.mm. yyyy	%	%	%	%	%
EUR	31.12.2012	0.28%	0.38%	0.78%	1.62%	2.27%
	31.03.2013	0.27%	0.41%	0.83%	1.62%	2.24%
	30.06.2013	0.29%	0.50%	1.14%	1.95%	2.46%
	30.09.2013	0.27%	0.46%	1.14%	2.02%	2.60%
	31.12.2013	0.28%	0.45%	1.15%	2.10%	2.71%
CHF	31.12.2012	0.28%	0.19%	0.40%	1.00%	1.59%
	31.03.2013	0.18%	0.09%	0.36%	1.02%	1.62%
	30.06.2013	0.17%	0.12%	0.68%	1.45%	1.93%
	30.09.2013	0.16%	0.08%	0.60%	1.45%	2.00%
	31.12.2013	0.13%	0.07%	0.68%	1.59%	2.19%
USD	31.12.2012	0.50%	0.39%	0.83%	1.83%	2.70%
	31.03.2013	0.39%	0.31%	0.85%	1.96%	2.86%
	30.06.2013	0.37%	0.41%	1.49%	2.69%	3.40%
	30.09.2013	0.32%	0.37%	1.47%	2.77%	3.60%
	31.12.2013	0.30%	0.37%	1.68%	3.08%	3.88%
KRW	31.12.2012	2.78%	2.83%	3.04%	3.26%	3.40%
	31.03.2013	2.51%	2.47%	2.56%	2.81%	3.08%
	30.06.2013	2.94%	3.07%	3.39%	3.68%	3.44%
	30.09.2013	2.66%	2.79%	3.11%	3.45%	3.72%
	31.12.2013	2.83%	2.95%	3.26%	3.62%	3.92%
CZK	31.12.2012	0.39%	0.55%	0.81%	1.39%	2.14%
	31.03.2013	0.35%	0.48%	0.75%	1.23%	1.96%
	30.06.2013	0.46%	0.75%	1.43%	1.90%	2.60%
	30.09.2013	0.37%	0.58%	1.21%	1.99%	2.78%
	31.12.2013	0.28%	0.47%	1.18%	2.05%	2.67%
HUF	31.12.2012	5.17%	5.11%	5.11%	5.50%	4.83%
	31.03.2013	4.26%	4.27%	4.50%	5.28%	4.68%
	30.06.2013	4.08%	4.41%	4.93%	5.69%	5.07%
	30.09.2013	3.28%	3.49%	4.12%	5.06%	4.47%
	31.12.2013	2.86%	3.05%	3.96%	5.19%	5.20%
PLN	31.12.2012	3.43%	3.35%	3.35%	3.58%	3.47%
	31.03.2013	3.01%	3.01%	3.15%	3.46%	3.41%

#### SWAP RATES | TABLE 1

		1 year	2 year	5 year	10 year	20 year
	as of dd.mm.					
Currency	уууу	%	%	%	%	%
	30.06.2013	2.61%	2.99%	3.65%	4.00%	4.01%
	30.09.2013	2.70%	3.03%	3.67%	4.09%	4.10%
	31.12.2013	2.60%	2.83%	3.57%	4.11%	4.15%
THB	31.12.2012	2.64%	2.77%	3.25%	3.78%	4.40%
	31.03.2013	2.49%	2.60%	3.10%	3.65%	4.29%
	30.06.2013	2.17%	2.47%	3.16%	3.71%	4.60%
	30.09.2013	2.40%	2.62%	3.26%	3.79%	4.37%
	31.12.2013	1.95%	2.25%	3.08%	3.75%	4.28%
TWD	31.12.2012	0.91%	0.92%	1.04%	1.29%	2.16%
	31.03.2013	0.80%	0.82%	1.00%	1.25%	1.60%
	30.06.2013	0.81%	0.85%	1.07%	1.32%	1.68%
	30.09.2013	0.84%	0.91%	1.21%	1.58%	1.84%
	31.12.2013	0.77%	0.87%	1.23%	1.61%	1.79%
JPY	31.12.2012	0.24%	0.22%	0.31%	0.86%	1.82%
	31.03.2013	0.13%	0.12%	0.18%	0.56%	1.46%
	30.06.2013	0.15%	0.17%	0.40%	0.92%	1.73%
	30.09.2013	0.12%	0.15%	0.30%	0.78%	1.62%
	31.12.2013	0.11%	0.11%	0.30%	0.85%	1.68%

Table 2 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 2 100% ILLIQUIDITY PREMIUM | TABLE 2

	31.12.2012	31.03.2013	30.06.2013	30.09.2013	31.12.2013	Term	Phase-out
Currency	bps	bps	bps	bps	bps		
EUR	44 bps	39 bps	38 bps	31 bps	28 bps	15	5
CHF	3 bps	3 bps	0 bps	0 bps	3 bps	10	5
USD	59 bps	57 bps	65 bps	60 bps	45 bps	30	0
CZK	9 bps	7 bps	7 bps	4 bps	3 bps	15	0
HUF	9 bps	7 bps	7 bps	4 bps	3 bps	10	5
PLN	9 bps	7 bps	7 bps	4 bps	3 bps	15	0
THB	5 bps	3 bps	22 bps	31 bps	44 bps	10	5

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

Table 3 shows the ultimate forward rate and entry point parameters used when applying yield-curve extrapolations. Ultimate forward rates are determined by macro-economic methods, the most important inputs being long term expected inflation and real interest rates.

#### YIELD-CURVE EXTRAPOLATION

Table 3

	Entry point	Ultimate forward rate
Currency		%
EUR	20	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%

According to MCEV Principles G15.3, volatility assumptions should be based on the most recently available information as at the valuation date. Swaption implied volatilities used for the 2013 MCEV calculations were therefore based on 30 December 2013.

For similar reasons that yield-curve extrapolations were applied, for durations where no deep and liquid swaption markets exist, volatility anchoring is applied. For each currency the last liquid option maturities are determined. Market volatility quotes are used until the last liquid tenor. The historical volatility of the last liquid term node of the yield-curve is used as the long term target level for the swaption volatility surface. The volatility surface is then extrapolated from the last liquid option maturity terms to the long term target level.

Table 4 shows the development of swaption implied volatilities.

#### DEVELOPMENT OF SWAPTION IMPLIED VOLATILITIES

Table 4

	31.12.2012	31.03.2013	30.06.2013	30.09.2013	31.12.2013
Currency	%	%	%	%	%
EUR	23.5%	23.4%	22.4%	22.4%	21.7%
CHF	42.6%	33.4%	31.0%	32.1%	28.3%
USD	21.6%	20.5%	16.9%	15.6%	14.8%
KRW	12.9%	14.4%	14.1%	13.6%	12.9%

Market implied volatilities - 10 year options on 20 year swaps at the money (10 year swaps for CHF and KRW).

Table 5 shows the swaption implied volatilities at various terms for four main currencies.

#### SWAPTION IMPLIED VOLATILITIES

Table 5

		1 year	2 year	5 year	10 year	20 year
	Option term	%	%	%	%	%
EUR	31.12.2012	30.1%	29.1%	25.9%	23.5%	16.8%
	31.12.2013	23.7%	24.3%	24.0%	21.7%	15.3%
CHF	31.12.2012	44.9%	43.9%	42.0%	42.6%	28.1%
	31.12.2013	24.7%	25.8%	27.4%	28.3%	21.7%
USD	31.12.2012	28.8%	28.2%	24.4%	21.6%	18.4%
	31.12.2013	20.4%	19.9%	17.7%	14.8%	14.2%
KRW	31.12.2012	14.2%	14.6%	13.8%	12.9%	12.0%
	31.12.2013	15.8%	14.4%	13.9%	12.9%	12.0%

Market implied volatilities on 20 year swaps at the money (10 year swaps for CHF and KRW).

Table 6 shows the starting points of the volatility extrapolation and long term target levels for each currency.

SWAPTION VO	DLATILITY	ANCHORING

Table 6

	Start of swaption volatility anchoring	Long term target level
Currency	Year	%
EUR	15	7.8%
CHF	15	8.3%
USD	15	15.3%
CZK	10	7.4%
HUF	10	11.5%
PLN	10	8.1%
THB	10	13.5%
KRW		11.4%

For modelling fixed income stochastic scenarios, the Libor Market 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 underlying swap terms available, in order to account for the long term nature of the life business.

A range of equity indices is considered. For modelling equity and real estate returns, an excess return 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 7 shows the equity option implied volatility for the main equity indices.

#### EQUITY OPTION IMPLIED VOLATILITIES

Table 7

		31.12.2012	31.03.2013	30.06.2013	30.09.2013	31.12.2013
	Index	%	%	%	%	%
EUR	DAX	23.5%	21.1%	23.5%	22.4%	19.9%
	Eurostoxx 50	25.4%	22.1%	24.3%	22.7%	20.4%
	CAC	24.0%	22.1%	23.9%	21.8%	20.5%
CHF	SMI	18.7%	20.0%	23.5%	17.8%	20.1%
USD	S&P 500	27.0%	21.6%	27.6%	24.4%	24.0%
KRW	KOSPI	22.3%	21.0%	22.0%	17.9%	16.6%

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.

Table 8 shows the real estate volatility for the main currencies.

REAL ESTATE VOLATILITIES	Table 8	
	31.12.2013	31.12.2012
Currency	%	%
EUR	13.8%	13.8%
CHF	10.0%	10.0%
USD	13.8%	13.8%
KRW	13.8%	13.8%

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

To show the impact of asset mixes and inter-economy relations, correlation assumptions were estimated from historic market data. Table 9 shows the correlation assumptions updated for 2013.

CORRELATION ASSUMPTIONS Table 9

	Fixed income 1 year bond rate				Equity Indices					
	EUR	CHF	USD	KRW	CAC	HDAX	KOSPI	SPI	Eurotoxx50	S&P500
Fixed income 1 year bond rate										
EUR	1.00	0.48	0.50	0.16	0.27	0.26	0.20	0.25	0.28	0.25
CHF		1.00	0.35	0.14	0.26	0.24	0.19	0.24	0.25	0.22
USD			1.00	0.16	0.07	0.09	0.01	0.09	0.07	0.06
KRW				1.00	0.04	-0.01	0.03	0.05	0.05	0.04
Equity Indices										
CAC					1.00	0.94	0.58	0.89	0.98	0.83
HDAX						1.00	0.60	0.86	0.96	0.80
KOSPI							1.00	0.58	0.58	0.50
SPI								1.00	0.87	0.76
Eurotoxx50									1.00	0.82
S&P500										1.00

1,000 path scenarios are used for stochastic calculations of options and guarantees. To reduce Monte-Carlo errors antithetic random numbers are used.

Given the significance of the O&G of Germany Life, 5,000 path scenarios were used by this entity. The higher number of paths further reduced Monte-Carlo errors.

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

For 2013 the capital charge for residual non-hedgeable risk was set to 3.25% on a percentile of 99.5% on internal risk capital with a target capitalization of 130% at the local entity level.

## B.3 Foreign currency exchange rates

EV results 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 10 below.

MAIN EXCHANGE RATES AGAINST EUR		Table 10	
€ MN			
	2013	2012	
CHF	1.23	1.21	
USD	1.38	1.32	
KRW	1,454.22	1,411.45	
CZK	27.37	25.10	
HUF	297.08	291.10	
PLN	4.16	4.08	
ТНВ	45.28	40.33	
TWD	41.07	38.28	

## 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 estimates 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 improve-

ments 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.

# ction year. All the expected ed business, such as holding clossts and development costs alculations. Equity risk premium 5.00% 5.00

**ECONOMIC ASSUMPTIONS FOR REAL-WORLD PROJECTION** 

Table 12

# 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 11 shows the nominal tax rates applied.

TAX ASSUMPTIONS Ta				
	2013	2012		
		%		
Germany	31%	31%		
France	34%	34%		
Italy	33%	33%		
USA	35%	35%		
Korea	22%	22%		
Switzerland	21%	21%		

# B.6 Real-world economic assumptions

The following assumptions are centrally provided:

- Risk-free yields
- Equity returns
- Real estate returns

Risk-free yield-curves are the same under real-world and risk-neutral assumptions.

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.

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 12.

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

# Appendix C: Disclaimer

# Cautionary note regarding forward-looking statements

The statements contained herein may include prospects, 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. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements.

Such deviations may arise due to, without limitation, (i) changes of the general economic conditions and competitive situation, particularly in the Allianz Group's core business and core markets, (ii) performance of financial markets (particularly market volatility, liquidity and credit events) (iii) frequency and severity of insured loss events, including from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the Euro/U.S. Dollar exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions, including related integration issues, and reorganization measures, and (xi) 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.

#### NO DUTY TO UPDATE

The company assumes no obligation to update any information or forward-looking statement contained herein, save for any information required to be disclosed by law.

# Appendix D: Glossary and abbreviations

#### **CCP**

Counter-cyclical premium. The CCP is defined as the maximum of the illiquidity premium and government spread premium. The government spread premium is defined as the maximum of 0 and the "ECB AAA and other government curve" over swaps, calculated at the 10 year tenor.

#### **CNHR**

Cost of residual non-hedgeable risk. The allowance made in the MCEV for non-hedgeable risks. This allowance should include the impact of non-hedgeable non-financial risks and non-hedgeable financial risks.

#### Covered business

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

#### **CReC**

Frictional cost of required capital. The allowance made in the MCEV for the frictional costs of required capital. Frictional costs should reflect the taxation and investment costs on the assets backing required capital. Further, frictional costs may be due to any sharing of investment income on required capital with policyholders.

#### DAC

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

The profits after tax plus changes in required capital plus interests on required capital, all based on real-world assumptions.

#### **EIOPA**

European Insurance and Occupational Pension Authority.

#### EV. MCEV

Market consistent embedded value is a measure of the consolidated value of shareholders' interests 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)

#### FS

Free surplus is the market value of 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.

#### **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).

#### IRR

Internal rate of return. The discount rate which gives a zero value of new business under real-world projections after allowing for any acquisition expense overrun or underrun.

#### 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 MCEV after initial adjustments and before capital movements.

#### NAV

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

#### **NBM**

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.

#### Appendix

- 38 Methodology
- 42 Assumptions
- 49 Disclaimer
- 50 Glossary and Abbreviations

#### 0&G

Time value of financial options and guarantees. The allowance made in the MCEV for the potential impact on future shareholder cash flows of all financial options and guarantees within the in-force covered business.

#### Payback period

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.

#### **PVFP**

Present value of future profits. 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.

#### **PVNBP**

Present value of new business premiums. The present value of future premiums on new business written during the year discounted at reference rate. It is the present value of projected new regular premiums, plus the total amount of single premiums received.

#### QIS 5

EIOPA Quantitative Impact Study 5.

#### ReC

Required capital. 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.

#### Reference rate

A proxy for a risk free rate appropriate to the currency term and liquidity of the liability cash flows. Based on swap rates, includes a swap credit adjustment and illiquidity premium.

#### Ultimate forward rate

The estimate of the ultimate forward rate (UFR) is defined in a QISS paper. An extrapolation is needed past last available market data points. The UFR is determined for each currency using macro-economic methods, the most important factors being long term expected inflation and real interest rates. Although the UFR is subject to revision, it should be stable and only change when there are fundamental changes to long term expectations.

#### VIF

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

#### **VNB**

Value of new business. 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 expense overrun or underrun, 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 (CReC), all determined at issue date.

#### **VOBA**

Value of the business acquired. It refers to the present value of future profits associated with a block of business purchased. It is booked as an intangible asset in the balance sheet.