

# Embedded value report

Zurich Insurance Group  
Annual Report 2014

# Embedded value report

Zurich produces and reports embedded value in accordance with the Market Consistent Embedded Value (MCEV) Principles and Guidance issued by the European Insurance CFO Forum (CFO Forum) in October 2009 to provide an economic view of the value of the life business to shareholders and to support financial management and strategic decision making. This report provides an overview of the movement in the MCEV over the calendar year 2014 and new business value added from new sales during the year, including further splits into constituent parts and geographical regions.

## Contents

Embedded value report – executive summary	3
1. Analysis of embedded value earnings	4
2. New business	6
3. Free surplus	10
4. Analysis of free surplus generation	11
5. Expected contribution and expected transfer to shareholders' net assets	12
6. Operating, economic and other non-operating variances	13
7. Dividends, injections and other movements	17
8. Value of business in-force	18
9. Reconciliation of shareholders' equity to embedded value	19
10. Sensitivities	20
11. Group MCEV	21
12. Embedded value methodology	22
13. Embedded value assumptions	28
Appendix: Embedded value tables	30
Statement by Directors	34
Auditor's report on embedded value	35

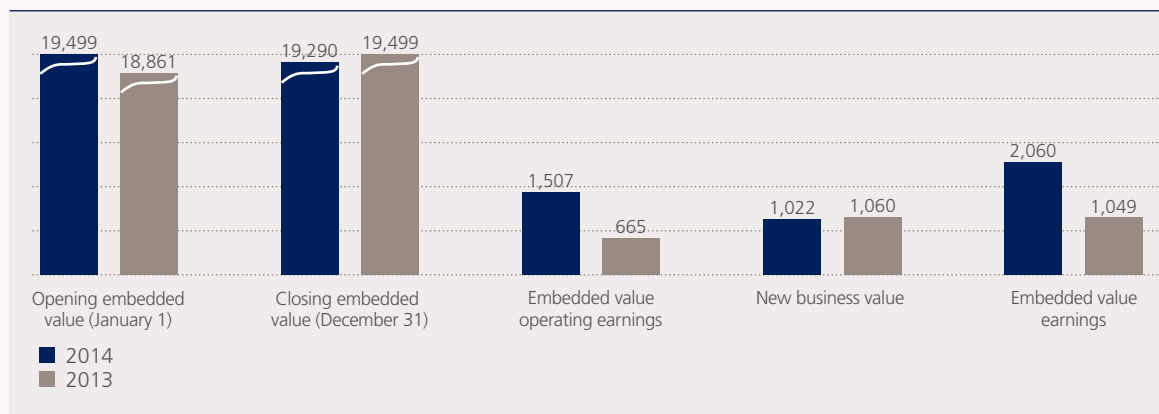
This report describes the development of embedded value of the Zurich Insurance Group (the Group) for the year ended December 31, 2014.

The majority of this report, sections 1 to 10, relates to Global Life, but summary information relating to total Group MCEV is given in section 11.

## Embedded value report – executive summary

### Key results

in USD millions, for the years ended December 31



### Embedded value key results

in USD millions, for the years ended December 31

	2014	2013	Change
Opening embedded value	19,499	18,861	638
Closing embedded value	19,290	19,499	(209)
Embedded value operating earnings	1,507	665	842
<i>of which new business value</i>	1,022	1,060	(38)
Embedded value earnings	2,060	1,049	1,010

All metrics are reported net of non-controlling interests.

**Embedded value operating earnings** were USD 1,507 million. The earnings included USD 764 million of expected emergence of value from business in-force, USD 1,022 million of new business value, offset by USD 278 million of operating variances with the main contributor being the updated operating assumptions.

**New business value** was USD 1,022 million, a decrease of USD 38 million or 2 percent on a local currency basis compared with 2013. This was mainly driven by Latin America, lower sales in International Group Risk Solutions (IGRS) and the revision of the expense methodology introduced at the end of 2013. There were lower margins on protection business in Zurich Santander and in North America due to changes to lapse assumptions and on individual annuities in Chile as a result of the change to the yield curve methodology. This was partially offset by high sales in corporate business in the UK, particularly in the last quarter of 2014.

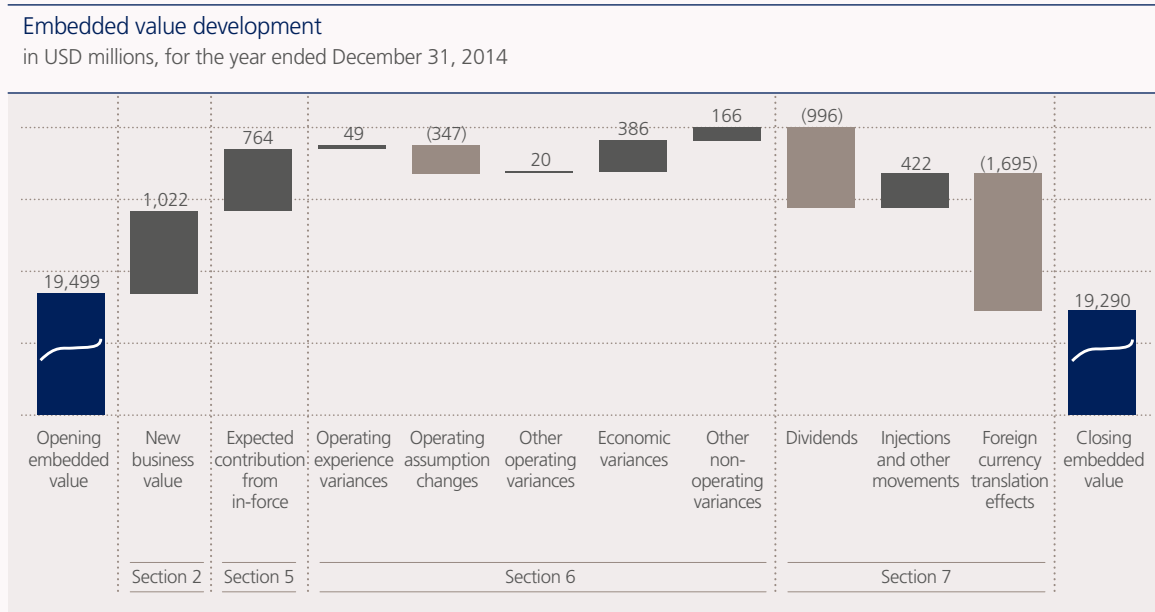
**Embedded value earnings** were USD 2,060 million. The earnings were positively impacted by USD 386 million of economic variances, particularly in Italy, Ireland, Spain and North America partially offset by negative effect in Germany. The expected contribution from in-force was USD 764 million.

**Dividends, injections and other movements together with the foreign currency translation effects** were USD 2,268 million which resulted in an overall decrease in Embedded value compared to previous year. The foreign currency translation effects reduced the embedded value by USD 1,695 million.

## Embedded value report *continued*

### 1. Analysis of embedded value earnings

The graph and table below show how embedded value has decreased from USD 19,499 million to USD 19,290 million during 2014. Each movement is described in its own section of the report, as detailed on the graph below.



### Analysis of embedded value earnings

in USD millions,  
for the years ended December 31

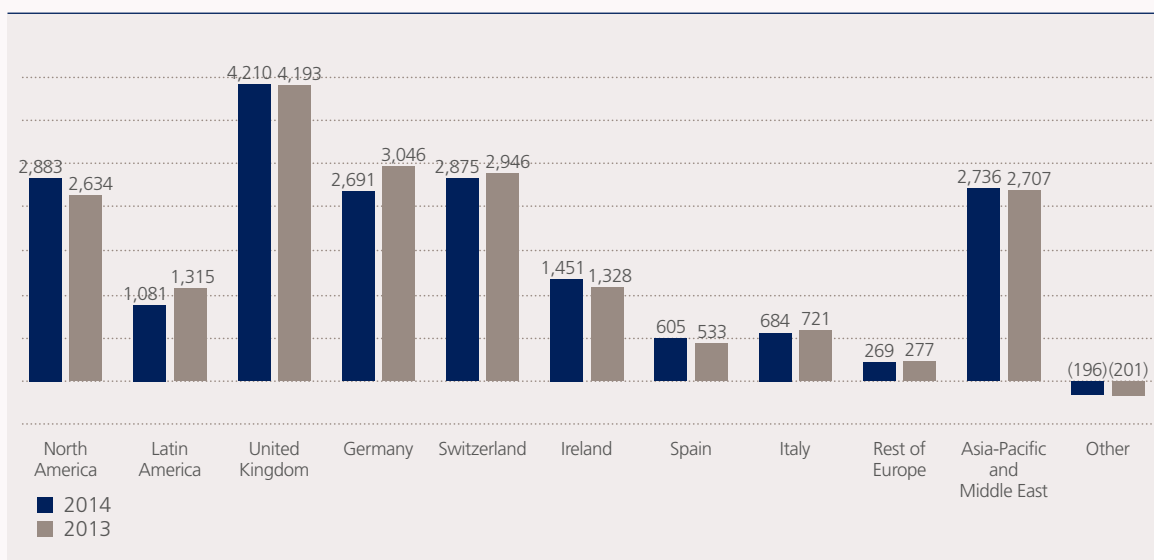
	2014					2013
	Required capital	Free surplus	Shareholders' net assets	Value of business in-force	Total	Total
<b>Opening embedded value</b>	<b>5,569</b>	<b>2,790</b>	<b>8,359</b>	<b>11,140</b>	<b>19,499</b>	<b>18,861</b>
Dividends in the first six months of the year	–	(574)	(574)	–	(574)	(465)
Injections in the first six months of the year <sup>1</sup>	–	203	203	–	203	–
Other movements in the first six months of the year <sup>1</sup>	(41)	(14)	(55)	89	34	116
<b>New business value</b>	<b>656</b>	<b>(1,431)</b>	<b>(775)</b>	<b>1,797</b>	<b>1,022</b>	<b>1,060</b>
Expected contribution at reference rate	2	106	108	160	268	199
Expected contribution in excess of reference rate	4	257	261	235	495	491
Expected transfer to shareholders' net assets	(416)	1,681	1,265	(1,265)	–	–
Operating experience variances	36	(22)	14	34	49	19
Operating assumption changes	18	263	280	(627)	(347)	(655)
Other operating variances	135	(230)	(94)	114	20	(449)
<b>Embedded value operating earnings</b>	<b>435</b>	<b>625</b>	<b>1,060</b>	<b>448</b>	<b>1,507</b>	<b>665</b>
Economic variances	128	340	468	(82)	386	537
Other non-operating variances	108	(170)	(62)	228	166	(153)
<b>Embedded value earnings</b>	<b>670</b>	<b>796</b>	<b>1,466</b>	<b>594</b>	<b>2,060</b>	<b>1,049</b>
Dividends in the last six months of the year	–	(422)	(422)	–	(422)	(342)
Injections in the last six months of the year <sup>1</sup>	–	210	210	–	210	–
Other movements in the last six months of the year <sup>1</sup>	–	(27)	(27)	2	(25)	208
Foreign currency translation effects	(570)	(267)	(837)	(859)	(1,695)	71
<b>Closing embedded value</b>	<b>5,629</b>	<b>2,696</b>	<b>8,324</b>	<b>10,966</b>	<b>19,290</b>	<b>19,499</b>

All metrics are reported net of non-controlling interests.

<sup>1</sup> In 2013 other movements included injections.

### Embedded value by geographical region

in USD millions, for the years ended December 31



In **North America**, embedded value increased by USD 249 million, mainly as a result of new business value and positive economic variances. This was partially offset by a lapse assumption update in Farmers New World Life (FNWL) and modeling enhancements.

In **Latin America**, embedded value decreased by USD 234 million mainly as a result of dividends paid and exchange rate movements. Adverse lapse and expense experience and related assumption changes in the region were more than offset by new business value.

In the **UK**, embedded value increased by USD 17 million, as a result of high new business volumes in corporate pension business and generally favorable operating experience. These impacts, together with positive economic variances, were largely offset by dividend payments and foreign currency translation effects.

In **Germany**, embedded value decreased by USD 355 million mainly driven by negative economic variances and updated expense and persistency assumptions partially offset by model enhancements. Foreign currency translation effects were also negative.

In **Switzerland**, embedded value decreased by USD 71 million due to dividend payments and foreign currency translation effects more than offsetting the positive contribution from updated assumptions and economic variances.

In **Ireland**, economic variances and a capital injection were the main contributors to the increase in embedded value of USD 123 million.

In **Spain**, the continued strong new business performance and positive economic variances increased embedded value by USD 73 million.

In **Italy**, embedded value decreased by USD 37 million with economic variances more than offset by dividend payments and foreign currency translation effects.

In the **Rest of Europe**, embedded value decreased by USD 8 million, with new business value and positive economic variances more than offset by dividend payments and foreign currency translation effects.

In **Asia-Pacific and Middle East**, embedded value increased by USD 29 million mainly as a result of new business value and economic variances partially offset by updated operating assumptions and foreign currency translation effects.

In **Other**, embedded value increased by USD 5 million with new business value and positive economic variances offset by central expenses.

## Embedded value report *continued*

### 2. New business

#### Global Life

New business by quarter	in USD millions	2014					2013				
		Q1	Q2	Q3	Q4	Q4 YTD	Q1	Q2	Q3	Q4	Q4 YTD
<b>Annual premium equivalent (APE)<sup>1,3</sup></b>		<b>1,101</b>	<b>1,272</b>	<b>1,153</b>	<b>1,678</b>	<b>5,203</b>	<b>1,042</b>	<b>1,039</b>	<b>1,148</b>	<b>1,189</b>	<b>4,418</b>
New annual premiums		722	835	737	937	3,230	684	706	783	807	2,981
New single premiums		3,792	4,371	4,155	7,415	19,733	3,583	3,330	3,649	3,816	14,378
Present value of new business premiums (PVNBP) <sup>2</sup>		10,293	11,993	11,529	19,140	52,954	8,917	9,166	12,207	10,296	40,586
Average annual premium multiplier		9.0	9.1	10.0	12.5	10.3	7.8	8.3	10.9	8.0	8.8
<b>New business value<sup>4</sup></b>		<b>254</b>	<b>261</b>	<b>242</b>	<b>265</b>	<b>1,022</b>	<b>283</b>	<b>264</b>	<b>243</b>	<b>270</b>	<b>1,060</b>
<b>New business margin<sup>4</sup> (% of APE)</b>		<b>25.8%</b>	<b>23.5%</b>	<b>24.1%</b>	<b>17.3%</b>	<b>22.1%</b>	<b>30.6%</b>	<b>28.6%</b>	<b>23.5%</b>	<b>25.8%</b>	<b>27.0%</b>
<b>New business margin<sup>4</sup> (% of PVNBP)</b>		<b>2.6%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>1.5%</b>	<b>2.1%</b>	<b>3.5%</b>	<b>3.1%</b>	<b>2.1%</b>	<b>2.9%</b>	<b>2.8%</b>

<sup>1</sup> APE is measured as new annual premiums plus 10 percent of new single premiums.

<sup>2</sup> PVNBP is measured as new single premiums plus the present value of new annual premiums.

<sup>3</sup> Premiums, APE and PVNBP are reported gross of non-controlling interests.

<sup>4</sup> New business value and new business margin are reported net of non-controlling interests.

**New business annual premium equivalent (APE)** was USD 5,203 million, an increase of USD 785 million or 19 percent on a local currency basis. North America, Brazil Santander, Isle of Man and Europe were all up significantly with decreases in Latin America Zurich, IGRS and Luxembourg. The main contributors to the increase in Europe were Spain from higher volumes of individual protection and savings business and the UK from higher sales of individual savings and higher sales with low margin in corporate business, particularly in the fourth quarter.

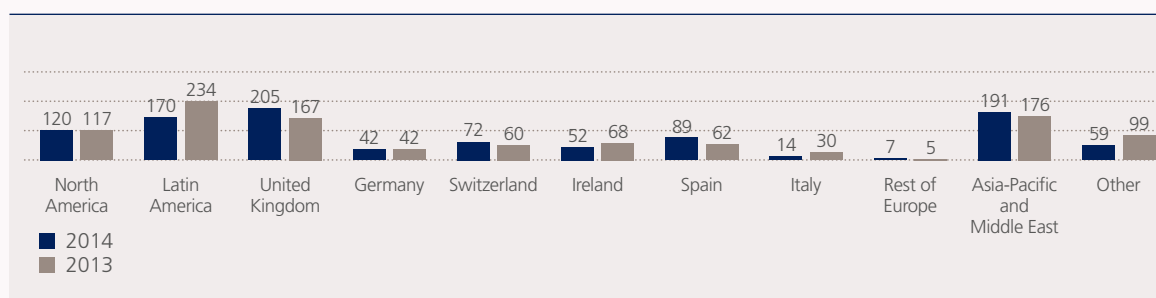
**PVNBP** was USD 52,954 million, an increase of USD 12,369 million or 29 percent on a local currency basis compared with of 2013. The main increase came from corporate pensions business in the UK and individual savings in UK and Spain. The increase in the average annual premium multiplier is driven by regular premium corporate pension and protection business in the UK. The substantial increase in the fourth quarter reflects the high level of sales of corporate business in the UK in this quarter.

**New business value** was USD 1,022 million, a decrease of USD 38 million or 2 percent on a local currency basis compared with 2013. This was mainly driven by Latin America, lower sales in IGRS and the revision of the expense methodology introduced at the end of 2013. There were lower margins on protection business in Zurich Santander and in North America due to changes to lapse assumptions and on individual annuities in Chile as a result of the change to the yield curve methodology. This was partially offset by the high sales in corporate business in the UK, particularly in the final quarter of 2014.

**New business margin** was 22.1 percent, a decrease of 5 percentage points compared with the same period of 2013 primarily driven by North America, Latin America and Europe. Just under half of this reduction came from the factors, noted above, which reduced new business value. The other driver was change in business mix with lower margin IFA/ Broker sales in North America and lower margin corporate business in the UK. The high fourth quarter sales of this corporate business in the UK was the main driver of the margin reduction seen in that quarter.

## Geographical region

New business value by geographical region  
in USD millions, for the years ended December 31



### New business by geographical region

in USD millions, for the years ended December 31	APE <sup>1</sup>		PVNBP <sup>1</sup>		New business value <sup>2</sup>		New business margin <sup>2</sup>			
							% of APE		% of PVNBP	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
North America	208	162	1,869	1,406	120	117	57.8%	72.4%	6.4%	8.3%
Latin America	1,160	1,178	5,623	6,158	170	234	23.0%	30.5%	4.7%	5.9%
of which:										
<i>Zurich Santander</i>	846	821	4,090	4,381	113	137	26.1%	32.6%	5.4%	6.1%
Europe	3,197	2,376	40,744	27,751	482	434	15.8%	18.8%	1.2%	1.6%
<i>United Kingdom</i>	1,510	1,019	24,795	15,422	205	167	13.6%	16.4%	0.8%	1.1%
<i>Germany</i>	428	363	4,194	2,937	42	42	9.9%	12.0%	1.0%	1.5%
<i>Switzerland</i>	253	225	2,872	2,651	72	60	28.5%	26.7%	2.5%	2.3%
<i>Ireland</i>	452	420	3,856	3,637	52	68	11.6%	16.1%	1.4%	1.9%
<i>Spain</i>	325	155	3,068	1,410	89	62	49.8%	67.1%	5.4%	7.6%
<i>Italy</i>	190	166	1,564	1,410	14	30	7.2%	17.9%	0.9%	2.1%
<i>Rest of Europe</i>	39	29	395	284	7	5	18.8%	18.3%	1.9%	1.9%
Asia-Pacific and Middle East	566	530	4,060	3,368	191	176	33.8%	33.4%	4.7%	5.2%
Other	72	173	658	1,903	59	99	83.0%	57.4%	9.0%	5.2%
<b>Global Life</b>	<b>5,203</b>	<b>4,418</b>	<b>52,954</b>	<b>40,586</b>	<b>1,022</b>	<b>1,060</b>	<b>22.1%</b>	<b>27.0%</b>	<b>2.1%</b>	<b>2.8%</b>

<sup>1</sup> APE and PVNBP are reported gross of non-controlling interests.

<sup>2</sup> New business value and new business margin are reported net of non-controlling interests.

**North America** increased APE by USD 47 million or 29 percent due to higher volumes in IFA/Brokers protection business. However the total margin decreased due to the lower margins in this business and the impact of the changed lapse assumption in FNWL. The net effect resulted in a lower, but still very strong, new business margin of 57.8 percent. New business value increased by USD 3 million or 3 percent.

**Zurich Santander** delivered an APE of USD 846 million, an increase of USD 25 million or 14 percent on a local currency basis. This came mainly from strong sales in individual protection and unit-linked business in Brazil. However new business value decreased by USD 24 million or 8 percent on a local currency basis as a result of a changed lapse assumption on protection business in Brazil.

APE in the other Zurich businesses in **Latin America** decreased by USD 42 million but increased 5 percent on a local currency basis. Corporate life and pension sales were up in Chile but down in Mexico. Margins in the region were lower as a result of the change in expense methodology and in Chile due to the change in the yield curve methodology. New business value decreased by USD 41 million or 29 percent on a local currency basis.

## Embedded value report *continued*

Overall in **Europe**, APE increased by USD 821 million or 31 percent on a local currency basis. The main increases were in the UK and Spain followed by Germany. In the UK, higher volumes of corporate business and individual saving business were partially offset by lower volumes of unit-linked business. In Spain, volumes increased mainly for individual saving products boosted by the current economic environment and the wider bank distribution network. Germany also experienced higher sales in saving products through the bank distribution channel. New business value increased by USD 48 million or 9 percent on a local currency basis, with lower margins reflecting the change in product mix.

In the **UK**, APE increased by USD 491 million or 41 per cent on a local currency basis, as a result of higher volumes of corporate business sold during the last quarter of the year, increased volumes in the retail wealth business offset by a drop in single premium unit linked. Higher profitability in corporate protection business was more than offset by reductions in margins for individual protection business. Despite the lower margins associated with changes in the mix of business, new business value increased by USD 38 million or 17 per cent on local currency basis.

In **Germany**, APE increased by USD 65 million or 18 percent on a local currency basis, mainly as a result of a special sales campaign in the Bank Distribution channel of a traditional single premium product. The less favorable economic conditions decreased margins and as a result new business value remained stable at USD 42 million.

In **Switzerland**, APE increased by USD 29 million or 11 percent on a local currency basis, mainly from higher sales of corporate protection business which also increased the overall margins. As a result new business value increased by USD 12 million or 18 percent on a local currency basis.

In **Ireland**, APE increased by USD 32 million or 7 percent on a local currency basis, benefitting from increased sales of corporate products, including bulk annuities and corporate life and pensions. However the lower volumes of cross-border Italian business and the reductions in margins for unit-linked business reduced overall margins. As a result new business value decreased by USD 16 million or 23 percent on a local currency basis.

In **Spain**, APE increased by USD 171 million or 110 percent on a local currency basis, mainly due to higher sales of individual saving products. This increased sales of products with lower margins resulted in a lower increase in new business value of USD 27 million or 43 percent on a local currency basis.

In **Italy**, APE increased by USD 24 million or 14 percent on a local currency basis, arising mainly from individual savings business. However margins reduced as a result of lower interest rates and as a result new business value decreased by USD 16 million or 54 percent on a local currency basis.

In **Rest of Europe**, APE increased by USD 10 million or 34 percent on a local currency basis. New business value increased of USD 2 million or 38 percent on a local currency basis, mainly from unit-linked business in Austria.

In **Asia-Pacific and Middle East**, APE increased by USD 36 million or 4 percent on a local currency basis. This arose mainly from the Isle of Man which experienced higher volume in corporate and unit linked business, although assumption changes resulted in lower margins. New business value also increased by USD 14 million, or 8 percent on a local currency basis, with the main contributions from Australia and Japan. Both countries experienced strong growth in new business value with both volume and margin improvements in protection business. The lower volumes in the Middle East and the decision to close the agency channel in Hong Kong partially offset the other positive impacts in the region.

In **Other**, APE decreased by USD 101 million or 59 percent on a local currency basis as a result of lower sales of unit-linked products in Luxembourg and lower sales of corporate protection business in IGRS. As a result new business value decreased by USD 40 million or 41 percent on a local currency basis.



## Pillars

New business by pillar	in USD millions, for the years ended December 31					
	APE <sup>1</sup>		New business value <sup>2</sup>		New business margin <sup>2</sup>	
	% of APE					
	2014	2013	2014	2013	2014	2013
Bank Distribution	1,741	1,584	282	301	24.0%	27.1%
Other Retail	1,554	1,441	437	491	28.2%	34.3%
Corporate Life & Pensions	1,908	1,394	303	269	15.9%	19.3%
<b>Total</b>	<b>5,203</b>	<b>4,418</b>	<b>1,022</b>	<b>1,060</b>	<b>22.1%</b>	<b>27.0%</b>

<sup>1</sup> APE is reported gross of non-controlling interests.

<sup>2</sup> New business value and new business margin are reported net of non-controlling interests.

APE in the **Bank Distribution** pillar was USD 1,741 million, an increase of USD 157 million compared with 2013. This was mainly due to strong volume growth in individual protection products in Zurich Santander and individual savings in Spain and Germany, partially offset by a reduction in unit-linked business in the UK and Luxembourg. New business value was USD 282 million, a decrease of USD 19 million compared with 2013, mainly due to lower margins from business mix.

APE in the **Other Retail** pillar was USD 1,554 million, an increase of USD 114 million compared with 2013. This was mainly driven by individual savings products in UK, individual protection products in North America and growth across all product lines in the Isle of Man. However new business value was USD 437 million, a decrease of USD 54 million compared with 2013. The decrease related mainly to the UK due to high volumes of lower margin individual savings in 2014 compared with strong sales of high margin individual protection products in the first quarter of 2013. There was also a decrease in Chile Zurich in individual immediate annuities, driven by lower margins under the revised yield curve methodology.

APE in the **Corporate Life and Pensions** pillar was USD 1,908 million, an increase of USD 514 million compared with 2013. Most of the increase came from higher volumes of lower margin corporate investment contracts in UK. New business value was USD 303 million, an increase of USD 34 million, coming mainly from the corporate investment contracts in UK, partially offset by the decrease in IGRS due to lower sales.

## Embedded value report *continued*

### 3. Free surplus

The free surplus is the market value of any asset allocated to, but not required to, support the in-force covered business of Global Life at the valuation date. This means that components of the free surplus might be used to fund future new business growth or support group consolidation constraints or pension deficits. Free surplus is calculated as Shareholders' net assets less the required capital. The required capital is the sum of the minimum amount of solvency capital required to satisfy local regulators and the additional capital that the management of the Company considers appropriate to hold in addition to minimum solvency capital. Some of the assets making up the free surplus are not available for distribution. Examples of constraints are group internal loans needed for liquidity, intangible assets and policyholder resources allowed under local regulation to cover solvency requirements and group internal reinsurance.

Shareholders' net assets	in USD millions, as of December 31	2014			2013
		Shareholders' net assets	Required capital	Required capital (% SM) <sup>1</sup>	Free surplus
North America		550	406	354%	144
Latin America		982	606	142%	376
of which:					
<i>Zurich Santander</i>		443	217	120%	226
Europe		5,679	3,542	137%	2,137
<i>United Kingdom</i>		1,651	850	133%	801
<i>Germany</i>		1,950	913	136%	1,037
<i>Switzerland</i>		686	531	147%	156
<i>Ireland</i>		494	428	160%	66
<i>Spain</i>		277	316	125%	(40)
<i>Italy</i>		447	394	126%	53
<i>Rest of Europe</i>		173	110	129%	63
Asia-Pacific and Middle East		1,240	947	139%	292
Other		(125)	128	146%	(253)
<b>Global Life</b>		<b>8,324</b>	<b>5,629</b>	<b>144%</b>	<b>2,696</b>

<sup>1</sup> SM is the shareholder portion of the local minimum solvency margin.

In **North America**, free surplus increased by USD 85 million with a positive impact from market returns and capital injections partially offset by new business strain.

In **Latin America**, free surplus decreased by USD 97 million. New business strain was covered by in force cash emergence with the main drivers of the decrease being dividend payments, an increase in required capital in Chile and exchange rate movements, partially offset by market returns.

In the **UK**, free surplus increased by USD 108 million. New business strain was covered by in force cash emergence. The main driver of the increase was the introduction of lapses into the statutory liability calculation for protection business with a partial offset from dividend payments.

In **Germany**, dividend payments and exchange rate movements were the main drivers of the decrease in free surplus of USD 43 million partly offset by market returns.

In **Spain**, free surplus decreased by USD 4 million with market returns more than offset by dividend payments.

In **Italy**, free surplus decreased by USD 35 million with market returns offset by dividend payments.

In **Rest of Europe**, free surplus increased by USD 6 million. The main drivers were market returns partly offset by dividend payments.

In **Asia-Pacific and Middle East**, free surplus decreased by USD 42 million. In-force cash emergence was offset by new business strain and adverse operating variances.

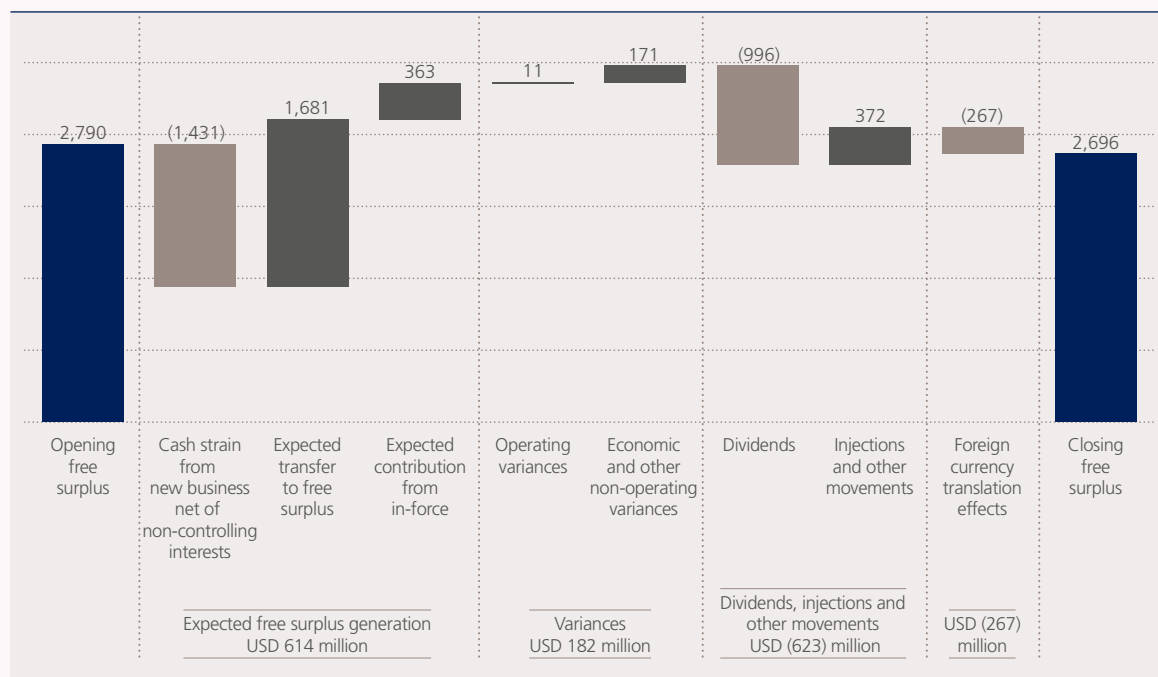
In **Other**, free surplus decreased by USD 60 million mainly due to expenses charged to Global Life's central unit.

## 4. Analysis of free surplus generation

The graph below shows how the free surplus value has decreased from USD 2,790 million to USD 2,696 million during 2014.

### Free surplus development

in USD millions, for the year ended December 31, 2014



**Expected free surplus generation** was USD 614. This included cash strain from new business net of non-controlling interests, expected transfer from in-force to free surplus and expected contribution to free surplus. The cash strain on new business of USD 1,431 million resulted from the combination of initial cash consumption of USD 775 million and an increase in required capital of USD 656 million. The expected transfer to shareholders' net assets increased free surplus by USD 1,681 million and was driven by expected profits of USD 1,265 million and the release of required capital of USD 416 million. The expected contribution from in-force to free surplus was USD 363 million.

**Variations** arising on operating and economic assumptions increased free surplus by USD 182 million. Variations represent the difference between actual experience during the period and that implied by assumptions. Economic variances were the largest component of this figure, with the main impacts in Chile, Germany and Italy.

**Dividends, injections and other movements** decreased free surplus by USD 623 million as dividends of USD 996 million paid to the Group exceeded injections of USD 413 million. Other capital movements were USD 41 million and included a transfer of annuity business to Non-Core Businesses and a change in minority interest in Germany.

**Foreign currency translation effects** decreased the U.S. dollar free surplus by USD 267 million.

## Embedded value report *continued*

---

### 5. Expected contribution and expected transfer to shareholders' net assets

#### **Expected contribution at reference rate**

The expected contribution at reference rate is the projected change in embedded value over the year using risk free investment returns applicable at the start of the year. The expected contribution at reference rate was USD 268 million.

#### **Expected contribution in excess of reference rate**

The expected contribution in excess of reference rate is the additional embedded value expected to be created if "real world" expected investment returns applicable at the start of the year were to emerge. The expected contribution in excess of reference rate was USD 495 million.

#### **Expected transfer to shareholders' net assets**

The expected transfer to shareholders' net assets shows the profits expected to emerge during the year in respect of business in-force at the start of the year. The net effect on embedded value is zero, because the change in the value of business in-force is offset by an equal and opposite change in shareholders' net assets.

## 6. Operating, economic and other non-operating variances

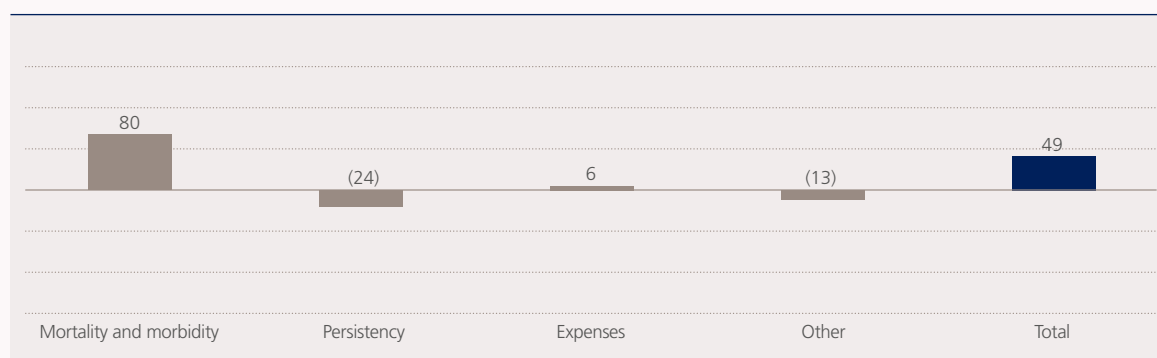
Operating, economic and other non-operating variances	in USD millions, for the year ended December 31, 2014				
	Operating experience variances	Operating assumption changes	Other operating variances	Economic variances	Other non-operating variances
North America	15	(124)	(24)	51	92
Latin America	(35)	(100)	(37)	(77)	5
of which:					
<i>Zurich Santander</i>	17	1	2	18	10
Europe	121	128	168	332	(53)
<i>United Kingdom</i>	65	56	33	50	18
<i>Germany</i>	(1)	(55)	122	(193)	2
<i>Switzerland</i>	3	133	23	43	3
<i>Ireland</i>	11	53	(5)	118	–
<i>Spain</i>	53	(19)	(6)	75	7
<i>Italy</i>	(4)	(36)	(5)	206	(83)
<i>Rest of Europe</i>	(5)	(3)	8	33	–
Asia-Pacific and Middle East	(41)	(251)	22	52	106
Other	(12)	–	(110)	28	17
<b>Global Life</b>	<b>49</b>	<b>(347)</b>	<b>20</b>	<b>386</b>	<b>166</b>

### Operating experience variances

Operating experience variances measure the difference between actual experience during the period and that implied by the operating assumptions. Experience variances occur in the normal course of business as short-term experience fluctuates around long-term assumptions.

#### Embedded value split of operating experience variance

in USD millions, for the year ended December 31, 2014



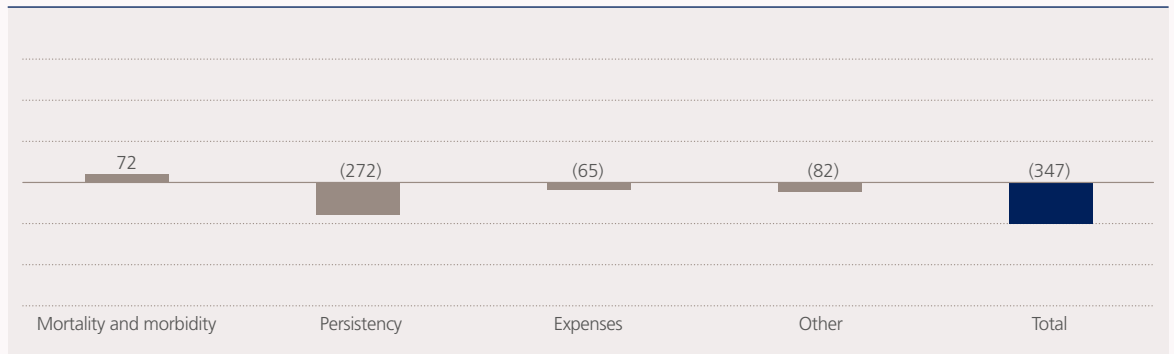
- **Mortality and morbidity** experience increased embedded value by USD 80 million. The main positive experience variance arose in UK, particularly on the unit-linked business and Spain where the variance included longevity experience.
- **Persistency** experience decreased embedded value by USD 24 million. The main negative experience was USD 23 million in the Isle of Man due to higher than expected lapses for Group business.

## Embedded value report *continued*

### Operating assumption changes

Changes in assumptions about future operating experience also have an impact on operating variances.

Embedded value split of operating assumption changes  
in USD millions, for the year ended December 31, 2014

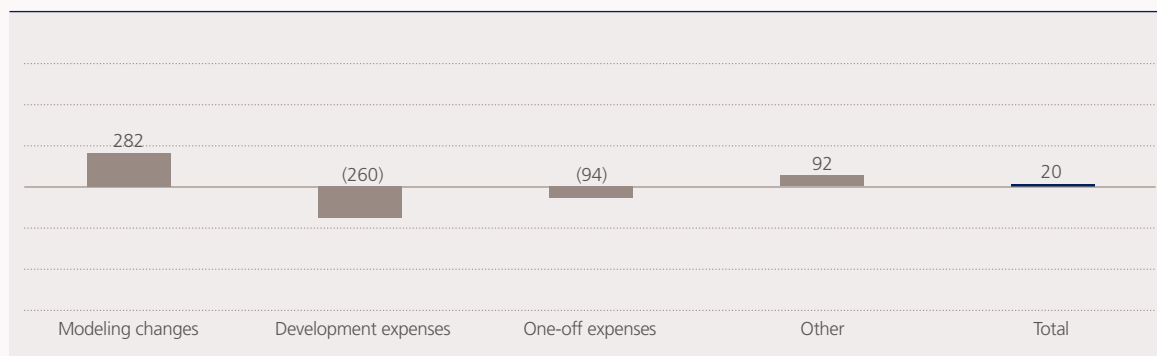


- **Mortality and morbidity** assumption updates increased embedded value by USD 72 million. The main changes were in Switzerland and North America contributing USD 73 million and USD 23 million respectively, partially offset by a decrease in Asia-Pacific and Middle East of USD 43 million.
- **Persistency** assumption updates negatively impacted embedded value by USD 272 million. The main drivers were North America and Asia-Pacific and Middle East contributing USD 101 million and USD 135 million respectively.
- **Expenses** assumption changes reduced embedded value by USD 65 million. The main contributors were Asia-Pacific and Middle East and Latin America contributing USD 52 million and USD 42 million respectively.
- **Other** assumption changes decreased embedded value by USD 82 million. The main contributors were a decrease of USD 29 million in North America, mainly due to a reduction in the assumed take-up rate of policy loans, a decrease of USD 26 million in Australia due to increase of reinsurance premiums and a decrease of USD 23 million in Spain as a result of updated dynamic lapse assumptions and updated management fees for pension business.

### Other operating variances

Other operating variances include modeling changes, development and one-off expenses and other operating variances not captured elsewhere.

Embedded value split of other operating variances  
in USD millions, for the year ended December 31, 2014



- **Modeling changes** increased embedded value by USD 282 million. The main contributors were Germany with USD 195 million as a result of more granular product modeling and the UK with USD 59 million from the inclusion of an allowance for salary inflation in Group business.
- **Development expenses** reduced embedded value by USD 260 million. The main contributors were UK with USD 74 million, Latin America with USD 54 million and Asia-Pacific and Middle East with USD 29 million. Other includes an impact from central costs of USD 78 million. Following changes to expense methodology introduced during 2013, any expense variance resulting from costs exceeding long-term expense assumptions for start-up businesses is now reported here.
- **One-off expenses** reduced embedded value by USD 94 million, mainly driven by Switzerland as a result of costs of implementing efficiency improvements and other projects, North America as a result of IT transformation costs, project costs in the Isle of Man and in expenses to close the agency sales force in Hong Kong.
- **Other** operating variances had a positive impact on embedded value of USD 92 million. The main contributions come from tax in UK and Group Life profits in Switzerland, partially offset by increased risk capital in Germany.

## Embedded value report *continued*

---

### **Economic variances**

Economic variances arise from the difference between actual economic experience during the year and the expected experience implied by the economic assumptions at the start of the year. Economic variances also include the impact of changes in assumptions in respect of future economic experience at the end of the year. In total, economic variances increased embedded value by USD 386 million in 2014.

In 2014, both the risk free rates and the liquidity premium spread reduced for the major currencies and in particular for the euro and the Swiss franc. Yields on sovereign debt were volatile across Europe, but spreads have reduced during the year. These movements are most significant for spread business and traditional participating business and as a result investment performance was positive in Italy, Ireland and Spain. In Germany the negative impact from the updated economic assumptions more than offset the positive investment variance.

Outside Europe, decreased interest rates positively affected the economic variance on protection business in Asia-Pacific and Middle East and North America.

### **Other non-operating variances**

Other non-operating variances include the impact of legal, tax and regulatory changes implemented during the year as well as other one-off items.

Other non-operating variances increased embedded value by USD 166 million, mainly driven by positive impacts in North America as a result of an updated change to the internal capital model, and from FX in the Isle of Man, partially offset in Italy by the impact on guaranteed costs of higher equities.



## 7. Dividends, injections and other movements

### Dividends, injections and other movements

Dividends, injections and other movements reflect dividends paid by Global Life to the Group, shown as a negative number in the table below, net of capital and other movements received from the Group, shown as a positive number in the table. Other movements can also relate to the value of business in-force in respect of acquisitions and disposals, or corporate restructuring.

Dividends, injections and other capital movements	in USD millions, for the year ended December 31, 2014			
	Dividends	Injections	Other movements	Total
North America	(150)	158	18	26
Latin America	(149)	67	(41)	(124)
of which:				
<i>Zurich Santander</i>	(124)	13	(41)	(152)
Europe	(630)	124	6	(500)
<i>United Kingdom</i>	(277)	71	–	(205)
<i>Germany</i>	(98)	–	92	(6)
<i>Switzerland</i>	(171)	–	–	(171)
<i>Ireland</i>	–	53	–	53
<i>Spain</i>	–	–	(86)	(86)
<i>Italy</i>	(54)	–	–	(54)
<i>Rest of Europe</i>	(30)	–	–	(30)
Asia-Pacific and Middle East	(58)	61	28	31
Other	(8)	3	(1)	(6)
<b>Global Life</b>	<b>(996)</b>	<b>413</b>	<b>9</b>	<b>(573)</b>

Changes in value for Global Life arising from dividends, injections and other capital movements are offset by equal and opposite value changes in the non-covered businesses of the Group and therefore have no impact on Group MCEV as shown in section 11, except as noted below.

**North America** paid a dividend of USD 150 million to the Group, net of an injection of USD 158 million to fund new business in the IFA/Broker channel. Other movements include the impact from the transfer of a block of annuity business to Non-Core Businesses.

In **Latin America**, the net dividends and capital movements reduced embedded value by USD 124 million.

In **Europe**, net dividends and capital movements were USD 500 million. Dividends were USD 630 million with the main contributions coming from UK, Switzerland and Germany. Capital injections were USD 124 million mainly in UK, Ireland and Asia-Pacific and Middle East. Other movements include USD 92 million from Germany due to a change in non-controlling interests and USD 86 million which represents the cost of acquiring distribution rights for the Caja de Ahorros del Mediterráneo (“CAM”) bank network in Spain.

In **Asia-Pacific and Middle East**, the net dividends and capital movements increased embedded value by USD 31 million.

In **Other**, a dividend of USD 8 million was paid.

### Other adjustments

Foreign currency translation effects represent the impact of adjusting opening embedded value, reported at the end-of-year exchange rates as of December 31, 2013 and movements during the year which are translated at average exchange rates during the year, to end-of-year exchange rates. The net effect of the change of the U.S. dollar against other currencies decreased the U.S. dollar embedded value by USD 1,695 million.

## Embedded value report *continued*

### 8. Value of business in-force

Components of value of business in-force	in USD millions, as of December 31	2014				2013	
		CE <sup>1</sup>	FC <sup>2</sup>	TVFOG <sup>3</sup>	CRNHR <sup>4</sup>	Value of business in-force	Value of business in-force
North America		2,787	(67)	(243)	(143)	2,334	2,029
Latin America		211	(48)	(14)	(50)	99	340
of which:							
<i>Zurich Santander</i>		334	(21)	(14)	(10)	290	279
Europe		8,563	(299)	(610)	(547)	7,107	7,342
<i>United Kingdom</i>		2,784	(36)	(22)	(167)	2,559	2,594
<i>Germany</i>		1,381	(209)	(274)	(158)	740	1,063
<i>Switzerland</i>		2,407	(21)	(71)	(127)	2,189	2,319
<i>Ireland</i>		1,021	(11)	(6)	(46)	957	835
<i>Spain</i>		365	(6)	(5)	(25)	329	224
<i>Italy</i>		468	(14)	(200)	(17)	237	207
<i>Rest of Europe</i>		137	(3)	(31)	(7)	96	100
Asia-Pacific and Middle East		1,704	(71)	(11)	(126)	1,497	1,536
Other		(18)	(17)	–	(36)	(71)	(107)
<b>Global Life</b>		<b>13,247</b>	<b>(501)</b>	<b>(878)</b>	<b>(903)</b>	<b>10,966</b>	<b>11,140</b>

<sup>1</sup> CE is the certainty equivalent value of business in-force.

<sup>2</sup> FC is the frictional costs.

<sup>3</sup> TVFOG is the time value of financial options and guarantees including the application of a liquidity premium.

<sup>4</sup> CRNHR is the cost of residual non-hedgeable risk (see section 12 d) for further details).

#### Maturity profile of value of business in-force

The value in-force (VIF) maturity profile sets out when the VIF profits are expected to emerge as free surplus. It does not include the release of required capital to free surplus which usually accompanies the emergence of the VIF profit. The VIF emergence is determined after taking into account frictional costs, the cost of residual non-hedgeable risk and the time value of financial options and guarantees.

Maturity profile of value of business in-force	in USD millions, as of December 31	2014		2013	
		VIF	% of Total	VIF	% of Total
1 to 5 years		4,102	37%	3,923	35%
6 to 10 years		2,650	24%	2,856	26%
11 to 15 years		1,874	17%	1,892	17%
16 to 20 years		1,004	9%	1,096	10%
more than 20 years		1,337	12%	1,373	12%
<b>Total</b>		<b>10,966</b>	<b>100%</b>	<b>11,140</b>	<b>100%</b>

The VIF maturity profile shows that 37 percent of the VIF should emerge as free surplus over the next five years and an additional 24 percent over the following five years. The main change in the first five years of the VIF emergence is driven by the assumptions update and the new business product mix.

## 9. Reconciliation of shareholders' equity to embedded value

Reconciliation of shareholders' equity to embedded value	in USD billions, as of December 31, 2014	
		Total
	<b>Shareholders' equity<sup>1</sup></b>	<b>19.3</b>
	Less intangible assets	
	<i>Goodwill</i>	(0.3)
	<i>Deferred policy acquisition costs and deferred origination costs</i>	(14.2)
	<i>Other intangibles and present value of future profits</i>	(3.6)
	<i>Deferred front-end fees</i>	5.5
	Pension scheme liabilities <sup>2</sup>	1.2
	Less non-controlling interests <sup>3</sup>	0.1
	Other adjustments <sup>4</sup>	0.2
	<b>Embedded value shareholders' net assets</b>	<b>8.3</b>
	Value of business in-force	11.0
	<b>Embedded value</b>	<b>19.3</b>

<sup>1</sup> Shareholders' equity is the Global Life share of total shareholders' equity as reported in the Consolidated financial statements prepared on the basis of the Group's accounting policies set out in note 3 of the Consolidated financial statements.

<sup>2</sup> Pension scheme liabilities are deducted from shareholders' equity but are not deducted from embedded value shareholders' net assets.

<sup>3</sup> Primarily from non-controlling interests in Zurich Santander and Spain.

<sup>4</sup> Other adjustments include tax differences, policyholders' share of intangibles, reserving differences and asset valuation differences including consolidation differences with respect to certain trust assets.

## Embedded value report *continued*

### 10. Sensitivities

Sensitivities	in USD millions, as of December 31, 2014	Change in embedded value <sup>1</sup>	Change in new business value <sup>1</sup>
<b>Reported embedded value and new business value<sup>1</sup></b>		<b>19,290</b>	<b>1,022</b>
<b>Base embedded value and base new business value<sup>1</sup></b>		<b>18,847</b>	<b>1,006</b>
<b>Operating sensitivities</b>			
10% increase in initial expenses		n/a	(4%)
10% decrease in maintenance expenses		3%	7%
10% increase in voluntary discontinuance rates		(3%)	(11%)
10% decrease in voluntary discontinuance rates		4%	15%
5% improvement in mortality and morbidity for assurances		3%	10%
5% improvement in mortality for annuities		(2%)	(1%)
Required capital set equal to minimum solvency capital		–	1%
<b>Economic sensitivities</b>			
100 basis points increase in risk free yield curve		–	1%
100 basis points decrease in risk free yield curve <sup>2</sup>		(1%)	(4%)
10% fall in equity market values		(2%)	n/a
10% fall in property market values		(1%)	n/a
25% increase in implied volatilities for risk free yields		(1%)	(1%)
25% decrease in implied volatilities for risk free yields		1%	1%
25% increase in implied volatilities for equities and properties		(1%)	–
25% decrease in implied volatilities for equities and properties		–	1%

<sup>1</sup> Values used to calculate the sensitivities exclude a liquidity premium. Eliminating the liquidity premium reduces the reported embedded value and new business value by USD 443 million and USD 16 million, respectively.

<sup>2</sup> Risk free forward annual yields are decreased by 100 basis points at each duration. However, if a risk free forward annual yield at a given duration is less than 100 basis points, the decrease is to zero at that duration, not to a negative rate.

The key assumption changes represented by each of these sensitivities are given in section 12 p).

In each sensitivity calculation, all other assumptions remain unchanged except where they are directly affected by the revised assumption. The results include the impact of assumption changes on the time value of financial options and guarantees. The 100 basis points decrease in risk free yield curve increases the value of some products, such as term assurance, with fixed future cash flows discounted at lower rates. This increase is offset by a reduction in the value of other products, such as those where lower assumed investment returns reduce profitability.

## 11. Group MCEV

The Group MCEV is presented in the following table as the Global Life covered business valued using MCEV Principles and the non-covered businesses which are valued at the unadjusted shareholders' equity. Non-covered businesses include the life businesses managed as part of Non-Core Businesses outside Global Life and all other Group businesses including General Insurance and Farmers.

Group MCEV	in USD billions, for the year ended December 31, 2014	Covered	Non-covered	Total
		business MCEV	businesses	Group MCEV
<b>Opening Group MCEV</b>		<b>19.5</b>	<b>14.7</b>	<b>34.2</b>
<i>Operating MCEV earnings<sup>1</sup></i>		1.5	2.7	4.2
<i>Non-operating MCEV earnings</i>		0.6	0.0	0.6
<i>Total MCEV earnings</i>		2.1	2.7	4.8
<i>Other movements in shareholders' equity<sup>2</sup></i>		0.0	1.0	1.0
<i>Adjustments<sup>3</sup></i>		(2.3)	(1.7)	(4.0)
<b>Closing Group MCEV</b>		<b>19.3</b>	<b>16.8</b>	<b>36.1</b>

<sup>1</sup> For non-covered businesses this is set equal to the Net Income After Tax over the period.

<sup>2</sup> For non-covered businesses this is equal to the change in non-controlling interests and unrealized gains and losses excluding the foreign currency translation effects over the period.

<sup>3</sup> Adjustments include dividends, capital and other movements and foreign currency translation effects.

## Embedded value report *continued*

### 12. Embedded value methodology

The Group has applied Market Consistent Embedded Value (MCEV) Principles and Guidance issued by the European Insurance CFO Forum in October 2009, for its Embedded value report for the companies and businesses in its Global Life segment (the covered business). The Embedded value report primarily relates to Global Life. Total Group MCEV is shown in section 11. The embedded value methodology adopted by the Group is based on a "bottom-up" market consistent approach to allow explicitly for market risk. In particular, asset and liability cash flows are valued using risk discount rates consistent with those applied to similar cash flows in capital markets, and options and guarantees are valued using market consistent models calibrated to observable market prices. Where markets exhibit a limited capacity, the valuation is based on historical averages. Embedded value excludes any value from future new business.

All amounts shown in U.S. dollars are rounded. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts.

#### a) Covered business

Covered business includes all business written by companies that are included in Global Life, unless otherwise stated. In particular:

- life and critical illness;
- savings (with profit, non-profit and unit-linked);
- pensions and annuity; and
- long-term health and accident.

For certain smaller companies in Global Life, no embedded value has been calculated but these companies have been included in embedded value at shareholders' equity, as calculated in accordance with the Group's accounting policies. The contribution from these companies to embedded value is less than 5 percent.

#### b) Reporting of embedded value

In line with MCEV Principles, embedded value is split between shareholders' net assets, including free surplus and required capital, and the value of business in-force.

The results are disclosed in a format that the Group considers to be appropriate for the market consistent methodology adopted.

#### c) Shareholders' net assets

Shareholders' net assets represent the market value of net assets held in respect of the covered business, and consist of the required capital and free surplus. The level of required capital reflects the amount of capital considered by the directors of each legal entity to be appropriate to manage the business. This is set at least at the level equal to the regulatory required capital of each legal entity, at which the regulator would intervene to request a capital injection and in addition, for the main companies, an adequate buffer to cover short-term volatilities in solvency due to financial and non-financial risks or to achieve the capital required to maintain the desired credit rating.

The free surplus comprises the market value of shareholders' net assets allocated to the covered business of the Global Life Segment in excess of the assets backing the required capital.

The Free surplus does not consider any allowance, for example, for capital required to fund future new business growth, group consolidation constraints or pension deficits.

In the UK, insurers are required to assess capital requirements on two separate bases, Pillar 1 and Pillar 2. For Zurich Assurance Ltd, Pillar 1 was more onerous both at December 31, 2013 and at December 31, 2014. The amounts of required capital and free surplus shown in this report applicable to Zurich Assurance Ltd reflect those positions. The required capital modeled for embedded value is based on 125 percent of the Group's target Pillar 1 required capital, and the analysis of change is performed on a Pillar 1 basis.

Shareholders' net assets are based on local statutory and regulatory accounting. Adjustments are made to embedded value where appropriate, for example in respect of any unrealized gains attributable to shareholders. Any such adjustments are made consistently with the calculation of the value of business in-force.

#### d) Value of business in-force

The value of business in-force is the present value of future projected profits, distributable after tax to shareholders from the covered business. It is defined as the certainty equivalent value of business in-force less frictional costs, the time value of financial options and guarantees, and the cost of residual non-hedgeable risk. These components are explained below.

**Certainty equivalent (CE) value** is the value calculated using discount rates consistent with those applied to the underlying cash flows in the capital markets. It includes the intrinsic value but excludes the time value of financial options and guarantees which is allowed for separately, as described below.

**Frictional costs (FC)** reflect a deduction for the cost of holding the required capital. Under the market consistent framework, the FC represents tax in respect of the future investment return on required capital together with the cost of future investment management expenses on required capital. In Germany, the policyholders' share of investment income on the required capital is also included.

For the purpose of these calculations, required capital is assumed to run off in line with existing business.

The allowance for FC is included both in the value of business in-force and in new business value. For new business value, FC is applied to the required capital to be held in respect of that business.

**Time value of financial options and guarantees (TVFOG)** represents additional costs in excess of the intrinsic value of options and guarantees which are already allowed for in the CE value. These are based on the variability of investment returns which need to be allowed for explicitly under MCEV Principles. The time value is calculated on a market consistent basis using stochastic modeling techniques, and after making allowance for expected management and policyholder behavior.

For products with significant guarantees, the time value has been calculated on a market consistent basis by deducting the average present value of shareholder cash flows using 1,000 stochastic economic simulations from the CE value (both for the value of business in-force and separately for new business value).

For most products, the average value has been calculated using Monte Carlo simulations. For a small number of products, the TVFOG has been derived using closed form solutions.

Where appropriate, the calculation of the TVFOG makes allowance for:

- dynamic actions that would be taken by management under different economic simulations, for example to implement a life business' investment strategy; and
- dynamic policyholder behavior, for example changes in surrender behavior as interest rates rise or fall, or take-up rates of guaranteed annuity options.

The **cost of residual non-hedgeable risk (CRNHR)** is an explicit deduction for non-hedgeable financial risks (non-hedgeable asset/liability management risks and reinsurance credit risk), and non-financial risks (mortality, persistency, expenses and operational risk). The CE value allows for best estimate shareholder cashflows. The CRNHR is largely an allowance for uncertainty in shareholder cashflows, and for risks which are not already considered in the CE value or the TVFOG, such as operational risk. Most residual non-hedgeable risks have a symmetric impact on embedded value apart from operational risk.

CRNHR is calculated as a charge on the capital held for residual non-hedgeable risks. This is calculated according to Zurich's internal risk based capital model by applying 2,000 shocks to the embedded value assumptions. To align with the MCEV Principles the risk based capital is scaled to a 99.5 percent confidence level by using empirical distributions where available, or by assuming probability distributions as appropriate.

## Embedded value report *continued*

The capital is projected over the lifetime of the business using appropriate risk drivers for each risk type. The present value of the risk capital is calculated by applying the swap curve as of the valuation date. The CRNHR allows for diversification across risk types and across geographical segments. This approach complies with MCEV Principles except Guidance 9.7 which does not allow for diversification benefits between covered and non-covered business. The Embedded value report does allow for diversification benefits between covered and non-covered business, which is consistent with the management view of the business and adds an estimated USD 501 million to embedded value and an estimated USD 57 million to new business value. Starting from January 1, 2015 these diversification benefits will be excluded in order to bring the presentation of MCEV results in line with the MCEV principles and guidance set by the CFO Forum.

A 4 percent cost of capital charge has been applied to the diversified present value of non-hedgeable risk based capital.

### **e) New business**

New business covers new contracts sold during the reporting period and includes recurring single premiums, new premiums written during the period on existing contracts and variations to premiums on existing contracts where these premiums and variations have not previously been assumed to be part of business in-force. Where recurring single premiums are projected over time to derive the corresponding new business value, they are treated as annual premium for the volume definition. Group Life business valued with a contract renewal assumption is treated as annual premium.

New business is valued at the point of sale. Explicit allowance is made for FC, TVFOG, and CRNHR. New business value is valued using actual new business volumes.

The value generated by new business written during the period is the present value of the projected stream of after tax distributable profits from that business.

In certain profit sharing funds, the new business written can affect the TVFOG for business written in prior years. This effect is taken into account in the new business value by valuing the new business on a marginal approach, the difference between embedded value with and without the new business. This captures the effect of cross-subsidies between business in-force and new business due to, for example, different interest rate guarantees operating in a shared common pool of assets.

New business is valued on a discrete quarter basis. Once calculated and reported, new business value for a quarter will not change in subsequent quarters in local currency terms. For details on the assumptions used for new business see section 13.

New business amounts in the Embedded value report are reported after the effects of non-controlling interests.

### **f) Asset and liability data**

The majority of the Group's embedded value has been calculated using a "hard close" approach, such that all asset and liability data reflect the actual position as of the valuation date.

Germany has followed an approach where liability model points are set up in advance, using the structure of a previous run, and then projected to the valuation date by scaling to match the expected balance sheet figures.

### **g) Market consistent discounting**

The Group has adopted a "bottom-up" market consistent approach for the projection and discounting of future cash flows in the calculation of embedded value. As a result, the risks inherent in the cash flows are allowed for in a way that is consistent with the way the market is expected to allow for such risks.

In principle, this method values each cash flow using a discount rate consistent with that applied to such a cash flow in the capital markets. For example, an equity cash flow is valued using an equity risk discount rate, and a debt security cash flow is valued using a debt security discount rate. If a higher return is assumed for equities, the equity cash flow is discounted at this higher rate.

In practice, the Group has applied a computational method known as a "risk neutral" approach. This involves projecting the assets and liabilities using a distribution of asset returns where all asset types, on average, earn the same risk free rate.



The risk free yield curve assumptions are based on the swap curve in each major currency (U.S. dollars, euro, British pounds and Swiss francs). For liabilities where payouts are either independent or move linearly with markets, deterministic techniques (referred to as "certainty equivalent") have been used. In such cases, the projection and discounting are based on the same risk free yield curve. Further details are set out under "Economic assumptions" in section 13.

#### **h) Economic scenario generator**

All operations use actual yield curves observable as of the valuation date for the calculation of the certainty equivalent value of business in-force.

The calculations of the TVFOG are based on stochastic simulations using an economic scenario generator provided by Barrie & Hibbert. The outputs ("simulations") have been calibrated to conform to the economic parameters specified by the Group.

The simulations used for calculation of TVFOG reflect the actual yield curves and implied volatilities observable as of the valuation date.

Simulations are produced for the economies in the U.S., the UK, Switzerland and the eurozone. In each economic area, risk free nominal interest rates are modeled using a LIBOR market model. The excess return on other asset classes relative to the total returns on risk free assets are then modeled using a multi-factor lognormal model. Hong Kong uses U.S. dollar simulations because their principal liabilities are U.S. dollar-denominated. Chile uses closed form solutions rather than simulations. Other operations, not mentioned above, have no significant options and guarantees. Further details are set out under "Economic assumptions" in section 13.

#### **i) Holding companies**

Holding companies allocated to Global Life have been consolidated in embedded value at their shareholders' equity. Related expenses have been included in the projection assumptions. Holding companies outside Global Life are not included in embedded value of the covered business.

#### **j) Consolidation adjustments**

Where a reinsurance arrangement exists between two life companies within Global Life, the value of the reinsurance is shown in embedded value of the region to which the ceding company belongs.

#### **k) Debt**

Where a loan exists between a company in Global Life and a Group company outside Global Life, the loan is included in embedded value at the same value included in the balance sheet of the other Group company.

#### **l) "Look through" principle – service companies**

There are some companies within Global Life that provide administration and distribution services. These are valued on a "look through" basis. The results do not include any Group service companies outside Global Life.

In Germany, the majority of distribution and administration is provided by service companies. These are valued on a "look through" basis. These companies also provide limited services to companies outside Global Life. The value of business in-force and new business value reflect the services provided to companies within Global Life. The shareholders' net assets of Global Life include, however, the full shareholders' net assets of these service companies.

In Switzerland, an investment management company provides asset management services to pension schemes written in foundations and other pension funds. The present value of the net asset management fees, after tax, is included in embedded value and new business value.

#### **m) Employee pension schemes**

In the Group's Consolidated financial statements, actuarial gains and losses arising from defined benefit pension and other defined benefit post-retirement plans are recognized in full in the period in which they occur and are presented on a separate line in the statement of comprehensive income, with a liability recognized for employee benefit deficits under IAS 19. This adjustment has not been made in the detailed embedded value described in this Embedded value report. If the adjustment had been made embedded value as of the valuation date would have been lower by USD 1,192 million. The actuarial and economic assumptions used for this adjustment are consistent with those used for the equivalent allowance made in the Group's Consolidated financial statements.

## Embedded value report *continued*

Expense assumptions for each life business include expected pension scheme costs in respect of future service entitlements.

### **n) Change in legislation or solvency regime**

The impacts of changes in legislation or solvency regimes are included in economic variance for the analysis of movement when they occur.

### **o) Translation to Group presentation currency**

To align embedded value reporting with the Group's Consolidated financial statements, relevant results have been translated to the Group presentation currency, U.S. dollar, using average exchange rates for the period. This applies to new business value and new business volumes (APE and PVNBP) for the current period and comparative figures. This approach has also been applied to the analysis of movement. Valuations as at a specified date are translated at end-of-period exchange rates.

The rates can be found in note 1 of the audited Consolidated financial statements as of December 31, 2014.

### **p) Sensitivities**

The key assumption changes represented by each of the sensitivities in section 10 are as follows:

#### **Operating sensitivities**

A 10 percent increase in initial expenses was considered for new business value only.

A 10 percent decrease in maintenance expenses means that, for example, a base assumption of USD 30 per annum would decrease to USD 27 per annum.

A 10 percent decrease in voluntary discontinuance rates means that, for example, a base assumption of 5 percent per annum would decrease to 4.5 percent per annum.

A 5 percent improvement in mortality and morbidity assumptions for assurances means that, for example, if the actuarial mortality assumption for assurances was 90 percent of a particular table, this would decrease to 85.5 percent.

A 5 percent improvement in mortality assumptions for annuities means that, for example, if the actuarial mortality assumption for annuities was 90 percent of a particular table, this would decrease to 85.5 percent.

Required Capital set to Minimum Solvency Capital means that frictional costs are applied to minimum solvency capital only and frictional costs on excess solvency capital are released.

#### **Economic sensitivities**

A 100 basis points increase and decrease was applied to the risk free forward yield curve across all durations. For the 100 basis points decrease sensitivity, if a risk free forward annual yield at a given duration is less than 100 basis points, the decrease is to zero at that duration, not to a negative rate.

A 10 percent fall in equity and property market values was assessed for embedded value only.

A 25 percent increase in implied risk free volatilities means that, for example, a volatility of 20 percent per annum would increase to 25 percent per annum.

A 25 percent increase in implied equity and property volatilities means that, for example, a volatility of 20 percent per annum would increase to 25 percent per annum.

In each sensitivity calculation, all other assumptions remain unchanged except where they are directly affected by the revised conditions. The results include any impact of the assumption changes on the time value of financial options and guarantees.

## 13. Embedded value assumptions

Projections of future shareholder cash flows expected to emerge from covered business and for new business are determined using best estimate operating assumptions. These assumptions, including mortality, morbidity, persistency and expenses, reflect recent experience and are reviewed annually and updated as appropriate. Allowance is made for future improvements in annuitant mortality based on experience and externally published data. Favorable changes in future operating efficiency are not anticipated in the assumptions – in particular for expenses and persistency.

For the purposes of calculating the value of business in-force, future economic assumptions, for example, investment returns and inflation, are based on period end conditions and assumed risk discount rates are consistent with these conditions.

For the purposes of calculating new business value, for each discrete quarter of new business, economic assumptions are based on market conditions at the start of the quarter. New business operating assumptions are reviewed annually and updated as appropriate with effect from the first quarter of the next calendar year. In general the operating assumptions remain unchanged throughout the year.

### a) Economic assumptions

#### Market consistent framework

The Group has adopted a computational method known as “risk neutral.” With this method the key economic assumptions are:

- risk free rates;
- implied volatilities of different assets; and,
- correlations between different asset returns.

Expected asset returns in excess of the risk free rate have no bearing on the calculated embedded value other than in the expected contribution used for the analysis of embedded value earnings. The expected return for equities comprises an equity risk premium added to the start of period one year swap rate. The expected return on corporate bonds is equal to the start of period one year swap rate plus a risk premium estimated by comparing the market yield on corporate bonds with the swap rates for equivalent durations. In addition, a reduction must be made to the yield to allow for the expected level of defaults.

#### Choice of “risk free yield curve”

The risk free yield curve is derived from mid-market swap rates applicable to each economy as of the valuation date. These curves were used to extract forward reinvestment yields that are used for all asset classes. The yield curves are consistent with the assumptions used by investment banks to derive their option prices and their use ensures consistency with the derivation of implied volatilities. They also have the advantage of being available for most of the markets in which the Group operates. Domestic yield curves are used by businesses in other countries, except Hong Kong and Argentina which use the U.S. dollar, as their liabilities are principally U.S. dollar-denominated.

#### Implied asset volatility and correlations

The Group’s embedded value model is based on market consistent assumptions. Interest volatility is derived from the implied volatility of interest rate swaptions. Swaption implied volatilities vary both by the term of the option and also the term of the underlying swap contract, a fact that is reflected in the economic scenarios. The equity volatilities are based on at-the-money forward European options on capital indices, consistent with traded options in the market. Volatility of property investments is derived from relevant historical return data for each modeled economy. Assumptions for long-term equity volatility and long-term correlations between equity, property and bond indices are prepared with reference to historical analysis.

#### Inflation

Inflation assumptions have been derived from the yields on index linked government bonds relative to the corresponding nominal government yield curve, where such index linked government bonds exist. Where appropriate, allowance has been made for expense inflation to exceed the assumed level of price inflation reflecting the contribution of salary related expenses to life company expenses. In Switzerland, reference was made to Swiss Financial Market Supervisory Authority (FINMA) published rate.

## Embedded value report *continued*

### Risk discount rate

Under the "risk neutral" approach, risk discount rates are based on the same risk free yield curves as those used to project the investment return.

For stochastic modeling, the risk discount rates are simulation specific and also vary by calendar year consistently with the projected risk free yields in each simulation.

### Liquidity premiums

The CFO Forum engaged Barrie & Hibbert who estimated a liquidity premium proxy to be equal to 50 percent times the credit spread over swaps less 40 basis points where credit spreads over swaps are equal to the credit spread on a representative corporate bond index less the swap rate for each particular currency.

The Group applies liquidity premium in the operating currencies of U.S. dollar, euro, British pound and Swiss franc in its embedded value.

The liquidity premium is applied to the following lines of business:

- 100 percent for annuities;
- 75 percent for contracts with participating features, universal life contracts and fixed interest annuities in the U.S.;
- 0 percent for all other lines of business.

All sensitivities in the report relate to the base yield curve with no liquidity premium.

### Expected contribution

The expected contribution for the analysis of embedded value earnings is based on a projection from the start of period to the end of period. This requires assumptions regarding the investment returns expected to be achieved over the period on different asset classes. The investment return assumptions (for this purpose only) are based on the "real world" returns expected by the Group. The use of "real world" investment assumptions gives a more realistic basis for the expected contribution calculation and allows for the risk underlying each asset. Any under or over performance will be reported through economic variance.

For fixed interest assets, the "real world" investment return assumptions are based on the gross redemption yield on the assets, less an allowance for defaults where appropriate, together with an adjustment to reflect the change over the period implied in the yield curve assumptions.

For equity assets for units where there is a substantial equity allocation, the investment return assumption is based on the long-term "real world" expected return. For equity assets for units without a material equity allocation the investment return assumption is based on the one year swap rate at the start of period plus a margin to reflect the additional risk associated with investment in this asset class.

For property assets, the investment return assumptions are based on the one year swap rate at the start of period plus a margin to reflect the additional risk associated with investment in this asset class.

These assumptions have been set by asset class and separately for each sub-fund in each life business in order to best reflect the actual assets held.

### Participating business

Rates of future bonus or crediting rates have been set at levels consistent with the "risk neutral" investment return assumptions and current bonus plans. In the UK, bonus rates have been set so as to exhaust any remaining assets in the relevant long-term funds. In certain scenarios shareholder injections may be required to meet existing guaranteed benefits and this additional cost is included in the TVFOG.

In other European life businesses and in the U.S., bonuses have been set to be consistent with the investment return assumptions and with the book value approach used by these life businesses in practice. Existing practice, contractual and regulatory requirements as well as the reasonable expectations of policyholders are considered in setting bonuses.

#### Taxation

Current income tax legislation and rates have been assumed to continue unaltered, except where changes in future such tax rates or practices have been announced.

### **b) Operating assumptions**

#### Demographic assumptions

The assumed future mortality, morbidity and lapse rates have been derived from recent operating experience and relevant industry statistics. Where operating experience or industry statistics are limited, the assumptions are derived from a best estimate of future developments and are subject to regular review as more experience emerges. Where appropriate, surrender and option take-up rate assumptions that vary according to the investment simulation under consideration have been used, based on an assessment of likely policyholder behavior.

#### Expense assumptions

Management expenses have been analyzed between expenses related to acquisition of new business, the maintenance of business in-force and, where appropriate, development expenses and one-off expenses. Future expense assumptions allow for expected levels of maintenance expenses. Headquarters' expenses relating to covered business have been allocated to business units, or to Global Life's central unit which is in region Other, and are reflected in assumed future expenses.

The maintenance expense assumptions allow for the expected cost of providing future service benefits in respect of the Group staff pension schemes. An adjustment to embedded value is noted in section 12 m) for pension scheme liabilities and no allowance is made in the expense assumptions for any contributions as a result of past service benefits.

No allowance has been made for future productivity improvements in the expense assumptions.

Where service companies have been valued on a "look through" basis, the value of profits or losses arising from these services have been included in embedded value and new business value.

The Group is liable for payments to be made to various distributors, each payment being dependent on preceding sales volumes or profits or other factors, in accordance with distribution agreements. As part of the economic valuation, for each such agreement, a liability is included in embedded value shareholders' net assets for the best estimate of the next potential payment attributable to the business issued to date.

In countries where significant development work is performed these are shown under "development expenses".

Any expense excluded from the unit cost base used for assumption setting requires approval from the Global Life Chief Financial Officer.

Expenses excluded from the unit cost base for embedded value reporting are split into development expenses and one-off expenses. Development expenses relate to expenses incurred to improve the long-term capacity of the business or to reduce its future unit costs, and include certain expenses for start-up operations, certain expenses for regional offices, and certain central overhead expenses not reflected in the long-term assumptions of the business units. They also include certain project-based costs and certain distribution expenses. One-off expenses are those that are not expected to recur and are short-term in nature.

All expenses in embedded value are net of tax appropriate to the business unit to which the expense is charged.

### **c) Dynamic decisions**

To reflect more realistically the outcome of stochastic simulations, the assumptions for each simulation make allowance for the behavior of policyholders and management actions in response to the investment conditions modeled.

In many life businesses, policyholders can exercise an option against the life company in certain circumstances, such as to surrender a policy. This leads to an increase in the assumed lapse rates when interest rates rise (or a corresponding reduction when interest rates fall). This dynamic effect in relation to lapse rates has been allowed for in the stochastic models.

The stochastic models allow, where appropriate, for management actions to change investment strategy in response to market conditions.

# Appendix

Embedded value results Global Life, by region	in USD millions, for the years ended December 31	North America		Latin America	
		2014	2013	2014	2013
<b>Embedded value information:</b>					
<b>Opening embedded value</b>					
Dividends in the first six months of the year <sup>1</sup>		(50)	(68)	(18)	(24)
Injections in the first six months of the year <sup>1</sup>		97		38	
Other movements in the first six months of the year <sup>1</sup>		18	1	(39)	(20)
<hr/>					
New business value		120	117	170	234
Expected contribution from in-force		94	159	139	42
Operating experience variances		15	(13)	(35)	18
Operating assumption changes		(124)	(265)	(100)	(19)
Other operating variances		(24)	(51)	(37)	(48)
<b>Embedded value operating earnings</b>		<b>81</b>	<b>(53)</b>	<b>137</b>	<b>227</b>
Economic variances		51	57	(77)	(191)
Other non-operating variances		92	26	5	(2)
<b>Embedded value earnings</b>		<b>224</b>	<b>30</b>	<b>65</b>	<b>35</b>
Dividends in the last six months of the year <sup>1</sup>		(100)	(68)	(131)	(182)
Injections in the last six months of the year <sup>1</sup>		61		29	
Other movements in the last six months of the year <sup>1</sup>		–	145	(2)	53
Foreign currency translation effects		–	–	(176)	(161)
<b>Closing embedded value</b>		<b>2,883</b>	<b>2,634</b>	<b>1,081</b>	<b>1,315</b>
<hr/>					
<b>New business information:<sup>2</sup></b>					
Annual premiums		165	154	837	855
Single premiums		436	74	3,236	3,231
Annual premium equivalent (APE)		208	162	1,160	1,178
Present value of new business premiums (PVNBP)		1,869	1,406	5,623	6,158
<b>New business value</b>		<b>120</b>	<b>117</b>	<b>170</b>	<b>234</b>
New business margin (% of APE)		57.8%	72.4%	23.0%	30.5%
New business margin (% of PVNBP)		6.4%	8.3%	4.7%	5.9%

<sup>1</sup> In 2013 other movements included injections.

<sup>2</sup> Premiums, APE and PVNBP are reported gross of non-controlling interests.

of which Zurich Santander		Europe		Asia-Pacific and Middle East		Other		Global Life	
2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
<b>776</b>	<b>820</b>	<b>13,044</b>	<b>11,298</b>	<b>2,707</b>	<b>3,043</b>	<b>(201)</b>	<b>312</b>	<b>19,499</b>	<b>18,861</b>
(2)	(22)	(497)	(347)	–	–	(8)	(26)	(574)	(465)
6		32		37		–		203	
(39)	(35)	24	43	33	93	(1)	(1)	34	116
113	137	482	434	191	176	59	99	1,022	1,060
52	32	425	392	104	94	3	2	764	689
17	7	121	22	(41)	–	(12)	(8)	49	19
1	22	128	(95)	(251)	(226)	–	(50)	(347)	(655)
2	4	168	390	22	(225)	(110)	(515)	20	(449)
<b>184</b>	<b>201</b>	<b>1,325</b>	<b>1,142</b>	<b>25</b>	<b>(180)</b>	<b>(60)</b>	<b>(472)</b>	<b>1,507</b>	<b>665</b>
18	37	332	706	52	(28)	28	(6)	386	537
10	(5)	(53)	(121)	106	(54)	17	(2)	166	(153)
<b>211</b>	<b>234</b>	<b>1,604</b>	<b>1,726</b>	<b>182</b>	<b>(262)</b>	<b>(15)</b>	<b>(480)</b>	<b>2,060</b>	<b>1,049</b>
(123)	(146)	(133)	(77)	(58)	(15)	–	–	(422)	(342)
7		93		24		3		210	
(2)	–	(18)	(7)	(5)	11	–	6	(25)	208
(102)	(75)	(1,361)	408	(184)	(163)	26	(12)	(1,695)	71
<b>733</b>	<b>776</b>	<b>12,786</b>	<b>13,044</b>	<b>2,736</b>	<b>2,707</b>	<b>(196)</b>	<b>(201)</b>	<b>19,290</b>	<b>19,499</b>
584	561	1,645	1,398	526	483	57	90	3,230	2,981
2,625	2,603	15,519	9,782	396	466	146	824	19,733	14,378
846	821	3,197	2,376	566	530	72	173	5,203	4,418
4,090	4,381	40,744	27,751	4,060	3,368	658	1,903	52,954	40,586
<b>113</b>	<b>137</b>	<b>482</b>	<b>434</b>	<b>191</b>	<b>176</b>	<b>59</b>	<b>99</b>	<b>1,022</b>	<b>1,060</b>
26.1%	32.6%	15.8%	18.8%	33.8%	33.4%	83.0%	57.4%	22.1%	27.0%
5.4%	6.1%	1.2%	1.6%	4.7%	5.2%	9.0%	5.2%	2.1%	2.8%

Appendix *continued*

Embedded value results Europe	in USD millions, for the years ended December 31	United Kingdom		Germany	
		2014	2013	2014	2013
		<b>Embedded value information:</b>			
<b>Opening embedded value</b>		<b>4,193</b>	<b>4,130</b>	<b>3,046</b>	<b>2,589</b>
Dividends in the first six months of the year <sup>1</sup>		(231)	–	(31)	(4)
Injections in the first six months of the year <sup>1</sup>		32	–	–	–
Other movements in the first six months of the year <sup>1</sup>		–	55	92	3
New business value		205	167	42	42
Expected contribution from in-force		61	61	106	54
Operating experience variances		65	(6)	(1)	2
Operating assumption changes		56	(83)	(55)	(47)
Other operating variances		33	(15)	122	357
<b>Embedded value operating earnings</b>		<b>421</b>	<b>124</b>	<b>215</b>	<b>408</b>
Economic variances		50	(100)	(193)	38
Other non-operating variances		18	(91)	2	(40)
<b>Embedded value earnings</b>		<b>489</b>	<b>(66)</b>	<b>23</b>	<b>407</b>
Dividends in the last six months of the year <sup>1</sup>		(46)	–	(67)	(77)
Injections in the last six months of the year <sup>1</sup>		40	–	–	–
Other movements in the last six months of the year <sup>1</sup>		–	–	–	–
Foreign currency translation effects		(266)	74	(372)	128
<b>Closing embedded value</b>		<b>4,210</b>	<b>4,193</b>	<b>2,691</b>	<b>3,046</b>
<b>New business information:<sup>2</sup></b>					
Annual premiums		842	652	311	307
Single premiums		6,685	3,670	1,163	557
Annual premium equivalent (APE)		1,510	1,019	428	363
Present value of new business premiums (PVNBP)		24,795	15,422	4,194	2,937
<b>New business value</b>		<b>205</b>	<b>167</b>	<b>42</b>	<b>42</b>
New business margin (% of APE)		13.6%	16.4%	9.9%	12.0%
New business margin (% of PVNBP)		0.8%	1.1%	1.0%	1.5%

<sup>1</sup> In 2013 other movements included injections.

<sup>2</sup> Premiums, APE and PVNBP are reported gross of non-controlling interests.



Europe										
Switzerland		Ireland		Spain		Italy		Rest of Europe		
2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	
<b>2,946</b>	<b>2,286</b>	<b>1,328</b>	<b>1,204</b>	<b>533</b>	<b>281</b>	<b>721</b>	<b>533</b>	<b>277</b>	<b>275</b>	
(151)	(163)	–	–	–	(27)	(54)	(133)	(30)	(21)	
–	–	–	–	–	–	–	–	–	–	
–	4	–	13	(68)	(6)	–	–	–	(27)	
72	60	52	68	89	62	14	30	7	5	
149	139	31	19	39	66	19	20	19	32	
3	12	11	9	53	14	(4)	(3)	(5)	(6)	
133	103	53	(47)	(19)	(24)	(36)	–	(3)	1	
23	111	(5)	(68)	(6)	(5)	(5)	4	8	4	
<b>379</b>	<b>426</b>	<b>142</b>	<b>(19)</b>	<b>155</b>	<b>114</b>	<b>(12)</b>	<b>51</b>	<b>26</b>	<b>37</b>	
43	302	118	73	75	153	206	238	33	–	
3	8	–	–	7	–	(83)	2	–	–	
<b>426</b>	<b>735</b>	<b>260</b>	<b>54</b>	<b>237</b>	<b>267</b>	<b>110</b>	<b>292</b>	<b>58</b>	<b>37</b>	
(20)	–	–	–	–	–	–	–	–	–	
–	–	53	–	–	–	–	–	–	–	
–	(2)	–	–	(18)	(4)	–	–	–	–	
(326)	86	(190)	56	(78)	21	(93)	30	(36)	12	
<b>2,875</b>	<b>2,946</b>	<b>1,451</b>	<b>1,328</b>	<b>605</b>	<b>533</b>	<b>684</b>	<b>721</b>	<b>269</b>	<b>277</b>	
108	111	142	117	123	84	98	107	22	20	
1,458	1,141	3,098	3,037	2,029	703	918	591	170	84	
253	225	452	420	325	155	190	166	39	29	
2,872	2,651	3,856	3,637	3,068	1,410	1,564	1,410	395	284	
<b>72</b>	<b>60</b>	<b>52</b>	<b>68</b>	<b>89</b>	<b>62</b>	<b>14</b>	<b>30</b>	<b>7</b>	<b>5</b>	
28.5%	26.7%	11.6%	16.1%	49.8%	67.1%	7.2%	17.9%	18.8%	18.3%	
2.5%	2.3%	1.4%	1.9%	5.4%	7.6%	0.9%	2.1%	1.9%	1.9%	

# Statement by Directors

---

## Statement by Directors

This Embedded value report has been prepared in all material respects in accordance with the Market Consistent Embedded Value Principles and Guidance issued by the European Insurance CFO Forum in October 2009.

The methodology and assumptions underlying the report are described in sections 12 and 13.

# Auditor's report on embedded value

## Auditor's report on embedded value

### To the Board of Directors of Zurich Insurance Group Ltd

We have audited the Embedded value report of Zurich Insurance Group Ltd ("the Company") included on pages 3 to 34 of the Annual Report 2014 for the year ended December 31, 2014. The embedded value information included in the Embedded value report has been prepared in accordance with the Market Consistent Embedded Value ("MCEV") Principles and Guidance issued by the European Insurance CFO Forum, as described on pages 22 to 26.

### Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the Embedded value report in accordance with the MCEV Principles and Guidance, including consistency of the applied methodology and the assumptions used and for an internal control system as determined necessary to enable the preparation of the Embedded value report that is free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on whether the Embedded value report has been properly prepared in accordance with the MCEV Principles and Guidance. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the Embedded value report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Embedded value report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Embedded value report, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the Embedded value report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the principles used and the reasonableness of significant estimates made, as well as evaluating the adequacy of the overall presentation of the Embedded value report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the Embedded value report of the Company for the year ended December 31, 2014 is prepared, in all material respects, in accordance with the MCEV Principles and Guidance.

### Basis of preparation

Without modifying our opinion, we draw attention to sections 12 and 13 of the Embedded value report, which describe the basis of embedded value methodology and embedded value assumptions. The Embedded value report is prepared in compliance with the MCEV Principles and Guidance referred to above and as a result, may not be suitable for another purpose. This report does not extend to any financial statements of Zurich Insurance Group Ltd.

PricewaterhouseCoopers AG

Peter Eberli  
Audit expert

Stephen O'Hearn  
Global relationship partner

Zurich, February 11, 2015

## Disclaimer & Cautionary Statement

Certain statements in this document are forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives of Zurich Insurance Group Ltd or the Zurich Insurance Group (the Group). Forward-looking statements include statements regarding the Group's targeted profit, return on equity targets, expenses, pricing conditions, dividend policy and underwriting and claims results, as well as statements regarding the Group's understanding of general economic, financial and insurance market conditions and expected developments. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans and objectives of Zurich Insurance Group Ltd or the Group to differ materially from those expressed or implied in the forward-looking statements (or from past results). Factors such as (i) general economic conditions and competitive factors, particularly in key markets; (ii) the risk of a global economic downturn; (iii) performance of financial markets; (iv) levels of interest rates and currency exchange rates; (v) frequency, severity and development of insured claims events; (vi) mortality and morbidity experience; (vii) policy renewal and lapse rates; and (viii) changes in laws and regulations and in the policies of regulators may have a direct bearing on the results of operations of Zurich Insurance Group Ltd and its Group and on whether the targets will be achieved. Zurich Insurance Group Ltd undertakes no obligation to publicly update or revise any of these forward-looking statements, whether to reflect new information, future events or circumstances or otherwise.

All references to "Farmers Exchanges" mean Farmers Insurance Exchange, Fire Insurance Exchange, Truck Insurance Exchange and their subsidiaries and affiliates. The three Exchanges are California domiciled interinsurance exchanges owned by their policyholders with governance oversight by their Boards of Governors. Farmers Group, Inc. and its subsidiaries are appointed as the attorneys-in-fact for the Farmers Exchanges and in that capacity provide certain non-claims administrative and management services to the Farmers Exchanges. Neither Farmers Group, Inc., nor its parent companies, Zurich Insurance Company Ltd and Zurich Insurance Group Ltd, have any ownership interest in the Farmers Exchanges. Financial information about the Farmers Exchanges is proprietary to the Farmers Exchanges, but is provided to support an understanding of the performance of Farmers Group, Inc. and Farmers Reinsurance Company.

It should be noted that past performance is not a guide to future performance.

Persons requiring advice should consult an independent advisor.

This communication does not constitute an offer or an invitation for the sale or purchase of securities in any jurisdiction.

THIS COMMUNICATION DOES NOT CONTAIN AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES; SECURITIES MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES ABSENT REGISTRATION OR EXEMPTION FROM REGISTRATION, AND ANY PUBLIC OFFERING OF SECURITIES TO BE MADE IN THE UNITED STATES WILL BE MADE BY MEANS OF A PROSPECTUS THAT MAY BE OBTAINED FROM THE ISSUER AND THAT WILL CONTAIN DETAILED INFORMATION ABOUT THE COMPANY AND MANAGEMENT, AS WELL AS FINANCIAL STATEMENTS.