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Generali  
**2016 Life Embedded Value**

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Supplementary Information



# INDEX

<b>1</b>	<b>INTRODUCTION .....</b>	<b>2</b>
<b>2</b>	<b>COVERED BUSINESS.....</b>	<b>3</b>
<b>3</b>	<b>RESULTS .....</b>	<b>4</b>
3.1	OVERVIEW OF 2016 RESULTS.....	4
3.2	MOVEMENT OF EMBEDDED VALUE .....	5
3.3	VALUE IN-FORCE.....	8
3.4	NEW BUSINESS .....	9
3.5	DISTRIBUTABLE PROFITS GENERATION.....	11
<b>4</b>	<b>RESULTS BY GEOGRAPHIC AREA .....</b>	<b>12</b>
4.1	ITALY .....	12
4.2	FRANCE.....	14
4.3	GERMANY.....	16
4.4	CENTRAL AND EASTERN EUROPE .....	18
4.5	EUROPE MIDDLE EAST AND AFRICA.....	20
4.6	LATIN AMERICA AND ASIA.....	22
<b>5</b>	<b>SENSITIVITY ANALYSIS.....</b>	<b>24</b>
<b>6</b>	<b>ASSUMPTIONS.....</b>	<b>26</b>
6.1	ECONOMIC ASSUMPTIONS.....	26
6.2	OPERATING ASSUMPTIONS.....	29
	<b>ANNEX A: METHODOLOGY.....</b>	<b>30</b>
	A1. ADJUSTED NET ASSET VALUE .....	30
	A2. VALUE IN-FORCE.....	30
	A3. NEW BUSINESS VALUE.....	32
	<b>ANNEX B: “REAL-WORLD” PROJECTIONS .....</b>	<b>33</b>
	<b>ANNEX C: DEFINITIONS .....</b>	<b>34</b>
	<b>INDEPENDENT AUDITOR’S REPORT .....</b>	<b>35</b>

**ASSICURAZIONI GENERALI**  
**2016 LIFE EMBEDDED VALUE**  
SUPPLEMENTARY INFORMATION

## 1 Introduction

Assicurazioni Generali S.p.A. (Generali) reports the profits from its life and health insurance business in its published financial statements according to IFRS reporting bases. An alternative method of reporting the value and determining the performance of life and health insurance business is to use Embedded Value accounting. This method is used by a number of European insurance groups to provide supplementary information to that shown in their published accounts.

Embedded Value (EV) is an actuarially determined estimate of the value of a company from a shareholder's perspective, excluding any value attributable to future new business.

Since the year-end 2005 EV valuation, Generali has been compliant with the CFO Forum's European Embedded Value (EEV) Principles and, starting from the year-end 2007 EV valuation, has adopted a "bottom-up" market consistent approach with allowances for the time value of financial options and guarantees, for the frictional cost of required capital and for the cost of non hedgeable risks.

Effective from the year-end 2013 EV valuation, Generali has decided to formally report under the Market Consistent Embedded Value (MCEV) Principles<sup>®</sup>, published by the CFO Forum in June 2008 and subsequently amended (in October 2009) to reflect the possibility to include a liquidity premium in the reference rate.

Following the introduction of the Solvency II regime in Europe (effective from 1<sup>st</sup> of January 2016) Generali's market consistent methodology has been updated to include features from Solvency II framework, allowed by the CFO Forum in the last updates released in October 2015 and in May 2016.

From year-end 2015 on, the reference rate is fully aligned with Solvency II methodology and required capital is based on approved Solvency II capital regimes for EEA companies and on Local Regulatory regime for non EEA companies.

From year-end 2016 contract boundaries, as defined in the Delegated Acts (Article 18) and in the Guidelines (Final Report on Public Consultation No.14/036, November 2014) has been introduced. Its application is related to the projection of specific future premiums (and related benefits) within the cashflows. Solvency II contract boundaries have been applied to year-end 2016 figures, not restating opening 2016 EV and related 2016 earnings. As a consequence at year-end 2016 only the in-force business, and not the new business that is valued on a quarterly basis, is affected by this change. Contract boundaries application will affect new business calculation starting from 1<sup>st</sup> quarter 2017.

Generali has engaged Ernst & Young to provide an external opinion on the methodology, assumptions and results according to the MCEV Principles (with the exception of Group MCEV that is not included in this Supplementary Information due to the non economic representation of the value of its non covered segment), as described in Section Independent Auditor's report.

The members of the board of directors of Assicurazioni Generali S.p.A. acknowledge their responsibility for the preparation of the Supplementary Information in accordance with the MCEV Principles. The directors confirm that the Embedded Value as at 31 December 2015 and 31 December 2016, and the Embedded Value earnings including the value added by new business in 2016, have been determined using methodology and assumptions that are compliant with the MCEV Principles as stated in Annex A. The EV disclosure should not be considered as a substitute for Generali's primary financial statements.

With reference to the covered business, this Supplementary Information document provides the MCEV results as at 31 December 2016, together with details of the methodology and the assumptions used.

## 2 Covered business

The Life EV results cover all of the Group's direct and indirect life business, as well as the long-term health business written in Germany and Austria (which has characteristics closely related to life insurance business). For the purpose of determining the Life net asset value, the perimeter includes all the operating life and health companies, considered net of any participations held in Group companies included in the IFRS financial statements and non-life segments, with the exception of those companies and vehicles that offer services directly supporting the covered business. In particular, therefore, asset gathering companies, pension funds, other financial companies and holding companies have not been included in the perimeter.

In addition to the values emerging in the life and health companies, value is also attributed to the stream of profits that are expected to be generated in Head Office and in holding companies with respect to direct life insurance and intra-group life reinsurance, and to the stream of profits generated in the Group's asset management companies, which are directly associated with life insurance business. All related expenses are taken into account on a look-through basis. Values include inwards reinsurance written, and are net of the impact of reinsurance ceded out of the Group.

No value is attributed in respect of future new business. The EV refers to contracts in force at the valuation date. Till year end 2016, automatic premium increases, characterised by reliable acceptance ratios, are included in the projection of the future cash flows according to historical experience. Correspondingly, new business refers only to new contracts written in the year and excludes other automatic premium increases relating to prior years' business.

Starting from year-end 2016, Solvency II Contract Boundaries definition is applied to the VIF; consequently the new business definition will be consistently updated from 1<sup>st</sup> quarter 2017.

Generali's "bottom-up" market consistent methodology covers 99% of life and health business of the Group in terms of technical reserves. The residual business is valued using a traditional deterministic valuation based on the financial assumptions described in Annex B.

*All the values shown in this disclosure are in Euro millions, after tax and after minorities.* The approach to consolidation adopted in the Life EV produces results that are consistent with the consolidated primary financial statements.

*Percentage variations of amounts from 2015 to 2016 always refer to changes on a comparable basis, neutralising the impact of changes in the covered perimeter and foreign exchange rates.*

## 3 Results

### 3.1 OVERVIEW OF 2016 RESULTS

The following table shows the main results of the life and health perimeter, in terms of EV and NBV.

#### *Main results at 31 December 2016 and 2015 (€ mln)*

	2016	2015
<b>EV</b>	<b>29,159</b>	<b>30,133</b>
EV earnings	1,239	6,375
Return on EV	4.1%	25.2%
Normalised Operating return on EV	12.8%	10.7%

	2016	2015	Change
<b>NBV</b>	<b>1,256</b>	<b>1,097</b>	<b>14.6%</b>
APE	4,847	5,210	-6.6%
Profitability on APE	25.9%	21.0%	+4.8 pts
IRR	15.7%	12.1%	+3.6 pts

*changes are on a comparable basis*

From year-end 2015 to year-end 2016 EV moves from 30,133mln to 29,159mln.

The operating EV earnings are equal to 4,076mln (leading to a solid 12.8% normalised operating return on EV).

Total **EV earnings** amount to 1,239mln (corresponding to an overall 4.1% return on EV) and are affected by the negative impact of economic variances (-2,847mln) mainly due to the worsening financial situation over 2016.

The negative economic variances have strongly impacted the Value In-Force, primarily due to the decrease of reference rates (Euro 10-year swap par yield moved from 1.00% to 0.66%) and to the widening of Italian government bond spreads (10-year BTP spread over swap increased by 51bps).

APE slowdown (-6.6%, on a comparable basis) as a consequence of the planned reduction in saving business (-9.7%), of the decrease of unit linked (-11.3%) mainly due to the market condition, only partially offset by the increase of protection business (+12.4%).

The new business **Profitability** in 2016 amounted to 25.9% with an increase of 4.8p.p. despite the worsening of economic condition. Indeed, being the full-year new business value calculated as the sum of each quarter value (based on beginning of period economic assumptions), the averaged 2016 scenario, compared with the corresponding 2015, is characterized by the reduction of interest rates (about 40bps) and an important increase in volatility.

The improved business mix, with lower exposure to saving business, the product enhancement and the further significant reduction of the level of guarantees (+8.0p.p. on NBM) have more than compensated the overall 2016 unfavorable economic environment (-3.2p.p. on NBM).

It has to be noted that the average guarantee declined by 0.11 p.p. (from 0.76% to 0.65%), whereas in the EURO area reduced from 0.60% to 0.43%. The reduction is mainly driven by the new guarantee (below zero) offered in France, and the remarkable reduction in Italy and in EMEA (explained by the closure of the saving business sales in Switzerland and reduced volumes of saving business in Austria).

### 3.2 MOVEMENT OF EMBEDDED VALUE

The following table shows the movement of the EV and its components (VIF and ANAV) from the end of 2015 to the end of 2016.

Expected results are calculated using “real world” best estimate assumptions (see Annex B).

The impact of the Solvency II Contract boundaries adjustment on year-end 2016 figures, is shown as last step of the movement, and therefore it is not included in the earnings.

#### ***Movement of Embedded Value (€ mln)***

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>30,133</b>	<b>17,605</b>	<b>12,528</b>
Change in perimeter	0	-12	13
Exchange rate fluctuation	20	13	7
<b>Adjusted Value at 31/12/2015</b>	<b>30,154</b>	<b>17,606</b>	<b>12,547</b>
New business value	1,256	2,176	-919
Expected contribution (reference rate)	351	270	82
Expected contribution (in excess of reference rate)	617	617	0
Transfers from VIF to ANAV	0	-2,324	2,324
Operating experience variances	1,190	1,138	51
Operating assumption changes	453	453	0
Other operating variances	209	199	10
Operating EV earnings	4,076	2,529	1,547
Economic variances	-2,847	-3,285	438
Other non operating variances	10	-36	45
Total EV earnings	1,239	-792	2,031
Capital movement	-647	0	-647
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>30,745</b>	<b>16,814</b>	<b>13,931</b>
Solvency II Contract Boundaries application	-1,586	-1,586	0
<b>Value at 31/12/2016</b>	<b>29,159</b>	<b>15,228</b>	<b>13,931</b>
	Total	Normalised Operating	
EV earnings	1,239	3,867	
<b>Return on EV</b>	<b>4.1%</b>	<b>12.8%</b>	

**Value at 31/12/2015:** this is the starting point of the movement, represented by the official value at 31/12/2015.

**Change in perimeter:** this is the effect of the difference between the Group companies' interest in the covered business or the covered business itself at the end of 2015 and 2016.

**Exchange rate fluctuation:** this is the effect of the difference between the exchange rates at the end of 2015 and 2016. The impact on EV is positive (+20mln), mainly as a consequence of the strengthening of Swiss Franc against Euro (+26mln).

**Adjusted value at 31/12/2015:** this is the adjusted starting point of the movement, basis for the calculation of the return on EV.

**New business value:** this is the impact of the new business written in 2016. The impact on EV (+1,256mln) represents the new business value at point of sale, calculated as the sum of the NBV of each quarter, based on beginning of period assumptions. The contribution to the ANAV (-919mln) is related to the negative contribution to profit in the year of sale.

**Expected contribution (reference rate and in excess of reference rate):** this is the effect of the roll forward of beginning of year amounts. The impact on EV (+968mln) is the sum of:

- +887mln coming from the roll forward of the beginning of year VIF and relevant required capital, calculated using the risk free rate component (+270mln) and the risk premium component (+617mln) of the 2015 implied discount rate;
- +82mln referring to the expected after tax return on free surplus, calculated using risk free rate assumptions.

**Transfers from VIF to ANAV:** the impact, neutral on EV, comes from the release, from VIF to ANAV, of the 2016 after tax result (2,324mln), as expected at the end of 2015 and inclusive of the expected return on the assets backing the required capital.

**Operating experience variances:** this is the effect of actual versus expected 2016 experience on operating items. The impact on EV (+1,190mln) is mainly explained by the revision of contractual guaranteed conditions, both rates and mortality, on Pension products portfolio in France (+1,013mln) and by a positive surrenders experience (+93mln, mostly in Germany).

**Operating assumption changes:** this is the effect of changes in future operating assumptions. The impact on VIF (+453mln) mainly comes from the revision of the mortality rates (+142mln, mostly in France) and surrender and paid-up rates (+217mln, mainly in Italy and in Germany).

**Other operating variances:** this is the combined effect of other non-recurrent operating items, such as actuarial platform enhancements, extraordinary expenses and residual variances. The impact on EV (+209mln) is mainly due to various improvements and refinements of the actuarial models (+392mln, mainly coming from Italy, EMEA and Germany) and the change in ESG model related to the introduction of interest rates normal implied volatilities, as a consequence of the unavailability of the whole surface of lognormal implied volatilities market quotations.

**Operating EV earnings** are equal to the sum of the new business value, the expected existing business contribution (at reference rate and in excess of reference rate), the transfers from VIF to ANAV, the operating experience variances, the operating assumption changes and the other operating variances. Operating EV earnings amount to +4,076mln.

**Economic variances:** this is the effect of actual versus expected 2016 experience and changes in future assumptions for economic items such as yield curves, implied volatilities, investment returns and taxes. The negative impact on EV (-2,847mln) corresponds to the sum of negative 3,285mln variances on VIF and the positive 438mln variances on ANAV.

More specifically, the -3.3bln VIF variances can be split as follows:

- -1.1bln: the impact of the reduction of the swap curve;
- -0.5bln: the combined effect of the negative impact of the widening of the spread versus the swap curve of the government bonds (-0.8bln) and the narrowing of corporate bonds spread (+0.3bln);
- -0.9bln: the negative impact of the decrease of the volatility adjustment;
- -0.1bln: the slightly negative impact of the equity market performance;
- -0.9bln: the negative impact due to the sharp increase in volatility;
- +0.2bln: the impact of the change in France taxation (for further details please refer to 6.1.2).

**Other non operating variances:** this is the effect of local regulatory and legal changes and of other residual non operating items not included above.

**Total EV earnings** are equal to the sum of operating EV earnings, economic variances and other non operating variances, and amount to +1,239mln. The corresponding return on EV (obtained by dividing the EV earnings by the adjusted opening EV) is equal to +4.1%.

**Capital movement:** this amount (-647mln) comprises dividends paid in 2016 out of the consolidation perimeter by the covered companies (-1,331mln), together with net movements (+684mln in aggregate) corresponding to dividends received from Group companies, capital injections and changes in covered companies' interest in other Group companies and other consolidation differences.

**Value at 31/12/2016 before Solvency II C.B. adj.** is equal to the sum of Adjusted value at 31/12/2015 (30,154mln), Total EV earnings (+1,239mln) and Capital movement (-647mln), and amounts to 30,745mln.

**Solvency II Contract Boundaries application:** this negative impact on VIF (-1,586mln) is derived from the exclusion of future premiums, and related cashflows and benefits, following the boundaries of contract as defined under Solvency II.

**Value at 31/12/2016:** is obtained adding the Solvency II C.B. adjustment of -1,586mln, mainly coming from France (-750mln), EMEA (-463mln) and CEE countries (-358mln), to the Value at 31/12/2016 before Solvency II C.B. adjustment (30,745mln), and amounts to 29,159mln.

Generali defines the **Normalised Operating EV earnings** as the operating EV earnings excluding the impact of other operating variances. According to this definition, normalised operating EV earnings amount to 3,867mln, with a remarkable 12.8% return on adjusted opening EV.

### 3.3 VALUE IN-FORCE

The table below reports the breakdown of VIF for 2016 and 2015 into its components.

#### ***Breakdown of Value in-force as at 31 December 2016 and 2015 (€ mln)***

	2016	2015
PVFP before Time Value of FG&O	20,104	21,567
Time Value of FG&O	-2,838	-2,039
PVFP after Time Value of FG&O	17,266	19,528
Cost of capital	-247	-257
Cost of NHR	-1,791	-1,666
<b>Value in-force</b>	<b>15,228</b>	<b>17,605</b>

Compared with 2015, the PVFP before Time Value of FG&O decreases as a consequence of the reduction of reference rates in the Eurozone. Notwithstanding the reduction of the average portfolio guarantees (from 1.80% to 1.73%), the decrease of interest rates and the increase in interest rates volatilities leads to a significant increase in the time value of the financial guarantees and options.

As a result, the PVFP after Time Value of FG&O decreases from 19,528mln to 17,266mln (-11.5% on a comparable basis).

The cost of capital reduces slightly by 10mln (-0.4% on a comparable basis) as a consequence of the decrease of interest rates curve underlying its calculation.

The cost of non hedgeable risks is based on a fixed charge applied to risk capital associated to Non Hedgeable Risks (see Annex A2) and its increase (+7.8% on a comparable basis) is mostly explained by the higher risk capital necessary to meet non hedgeable risks due to business growth.

In aggregate, the VIF decreases from 17,605mln to 15,228mln (-13.5% on a comparable basis).

The following table shows the expected run-off pattern of VIF emergence across future projection years, grouping discounted distributable profits into 5 year buckets. In particular, the table reports the contribution of each time-bucket's profits to the total VIF at year-end 2016. The calculation has been performed considering distributable profits (i.e. including the release of required capital) generated by the value in-force and calculated according to a deterministic projection based on "real-world" best estimate assumptions (see Annex B).

#### ***Contribution of future years to VIF as at 31 December 2016***

	Percentage of VIF	Cumulated distribution
Years 1-5	47%	47%
Years 6-10	23%	70%
Years 11-15	13%	83%
Years 16-20	7%	90%
Years 21-25	4%	94%
Years 26-30	3%	96%
Years 31 onwards	4%	100%

The profits emerging within the first 20 years of projection account for 90% of the overall VIF.

### 3.4 NEW BUSINESS

The table below shows the development of NBV from 2015 to 2016, together with the main profitability indicators.

<b><i>New Business Value 2016 and 2015 (€ mln)</i></b>			
	2016	2015	Change
<b>APE</b>	<b>4,847</b>	<b>5,210</b>	<b>-6.6%</b>
Annual premiums	2,724	2,753	-0.5%
Single premiums	21,230	24,568	-13.4%
PVNBP	46,164	48,295	-6.5%
<b>NBV</b>	<b>1,256</b>	<b>1,097</b>	<b>14.6%</b>
Profitability on APE	25.9%	21.0%	+4.8 pts
Profitability on PVNBP	2.7%	2.3%	+0.5 pts

*changes are on a comparable basis*

On a comparable basis, APE decline (-6.6%), mainly due to the marked reduction in single premiums (-13.4%, recorded in all the main countries except Asia) driven by the planned actions aiming at reducing the volume of saving products. Regular premiums slightly decrease (-0.5%); nevertheless they increased as a proportion of APE production (56.2% from 52.8% at YE15).

Saving business decreases (-9.7%), following the Group decision of slowing down the saving production in Germany (-34.9%), in Austria (-39.5%) and in Switzerland (-97.9%) where the production has shifted towards unit linked business. Protection business continues its positive trend recording an increase (+12.4%) mainly in France (+21.7%) and Asia (+72.0%). Unit linked business decreases by 11.3%, mostly in Italy (-18.8%) and Ireland (-20.5%), where the adverse market situation has influenced the production, while in Switzerland increases (+186.8%) since the unit linked production replaced the saving one.

The excellent business mix, together with the further significant reduction of level of guarantees has a strongly positive impact on the **profitability**, much bigger than the negative impact from the overall unfavourable economic scenarios (resulting in an average reduction of interest rates of 40 bps and in a volatility increase along the year), leading the margin on APE to rise from 21.0% to 25.9% (+0.6 pts is also due to the 2016 alignment to reference rates and Required Capital Solvency II methodology).

<b><i>Movement of New Business Value (€ mln) and NBM (%)</i></b>		
	NBV	NBM
<b>New business value 2015</b>	<b>1,097</b>	<b>21.0%</b>
Change in perimeter	4	0.1%
Exchange rate fluctuation	-4	0.0%
Products mix/volume	27	2.0%
Profitability	133	2.7%
<b>New business value 2016</b>	<b>1,256</b>	<b>25.9%</b>

The profitability increase is driven by the better product mix, where the protection business increase as a proportion of APE from 16.1% to 19.3%, together with an increased marginality (margin on APE from 53.5% in 2015 to 65.8% in 2016), and the saving business decreases as a proportion of APE from 58.9% to 56.9%. In addition the Group actions further improved the products quality, lowering the financial guarantees offered to the policyholders (overall decreased from 0.76% at YE15 to 0.65% at YE16).

The 2016 NBV increases by 14.6% on a comparable basis and amounts to 1,256mln.

**Breakdown of New Business Value 2016 and 2015 (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	1,837	1,801
Time Value of FG&O	-355	-443
PVFP after Time Value of FG&O	1,482	1,358
Cost of capital	-44	-97
Cost of NHR	-181	-165
<b>New Business Value</b>	<b>1,256</b>	<b>1,097</b>

The improved profitability is clearly observable in the PVFP after Time Value of FG&O, where the Time Value of the Guarantees is strongly reduced thanks to the guarantees reduction and the business mix shift. The reduced Cost of capital is mainly due to the 2016 definition of Required Capital that is now based only on Solvency II Capital without any allowance on Solvency I regime.

The table below shows the development from 2015 to 2016 of the main additional new business profitability indicators, obtained using "real-world" best estimate financial assumptions (see Annex B).

**New Business Value 2016 and 2015 (€ mln)**

	2016	2015
<b>1st year NB strain</b>	<b>-1,275</b>	<b>-1,643</b>
o/w industrial strain	-919	-970
o/w capital strain	-356	-673
1st year NB strain on PVNBP	-2.8%	-3.4%
o/w industrial strain	-2.0%	-2.0%
o/w capital strain	-0.8%	-1.4%
<b>IRR</b>	<b>15.7%</b>	<b>12.1%</b>
<b>Payback period (yrs)</b>	<b>5.8</b>	<b>6.9</b>

The 2016 new business strain amounts to -1,275mln, corresponding to the sum of the negative contribution from the profit in the year of sale (-919mln) and from the capital absorbed by the new business (-356mln). It has to be noted that the capital strain reduction (-47.2%) is driven by the 2016 definition of Required Capital that is based only on Solvency II Capital without any allowance on Solvency I regime.

### 3.5 DISTRIBUTABLE PROFITS GENERATION

Distributable profits are defined as the sum of the profit released by the business and the release of the required capital set aside to support it.

The following table shows the generation of distributable profits during 2016, stemming from the new business written during the year and the portfolio already in force at the end of 2015. The table reports the expected amount of 2016 distributable profit (calculated at the beginning of the year using “real-world” best estimate financial assumptions – see Annex B).

#### ***Generation of distributable profit during 2016 (€ mln)***

	Profit	Req. Capital release	Distributable Profit
New business	-919	-356	-1,275
In-force business	2,405	491	2,896
<b>Total expected distributable profit</b>	<b>1,486</b>	<b>135</b>	<b>1,621</b>

The following table shows the expected future emergence of undiscounted distributable profits stemming from the portfolio in force at year-end 2016 (i.e. excluding future new business) and from the new business written in 2016, again estimated using “real-world” best estimate assumptions.

#### ***Expected undiscounted distributable profits (€ mln)***

	In-force business	New business
Year 0	n/m	-1,275
Years 1-5	13,505	1,217
Years 6-10	8,094	972
Years 11-15	5,237	623
Years 16-20	3,040	445
Years 21-25	1,586	274
Years 26-30	1,138	175
Years 31 onwards	2,658	374

It has to be noted that the year-end 2016 In-force business takes into account the Solvency II adjustment in terms of contract boundaries application, while 2016 new business excludes the contract boundaries application. It will be considered starting from 1<sup>st</sup> quarter 2017.

## 4 Results by geographic area

### 4.1 ITALY

#### *Movement of Embedded Value (€ mln) - Italy*

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>10,341</b>	<b>6,917</b>	<b>3,424</b>
Change in perimeter	-1	-1	0
Exchange rate fluctuation	0	0	0
<b>Adjusted Value at 31/12/2015</b>	<b>10,340</b>	<b>6,916</b>	<b>3,424</b>
New business value	579	1,014	-436
Expected contribution (reference rate)	157	125	32
Expected contribution (in excess of reference rate)	386	386	0
Transfers from VIF to ANAV	0	-1,072	1,072
Operating experience variances	-19	-15	-5
Operating assumption changes	22	22	0
Other operating variances	452	326	125
Operating EV earnings	1,576	788	789
Economic variances	-1,857	-1,917	60
Other non operating variances	0	0	0
Total EV earnings	-281	-1,130	849
Capital movement	-377	0	-377
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>9,681</b>	<b>5,786</b>	<b>3,895</b>
Solvency II Contract Boundaries application	0	-0	0
<b>Value at 31/12/2016</b>	<b>9,681</b>	<b>5,786</b>	<b>3,895</b>
	Total	Normalised Operating	
EV earnings	-281	1,125	
<b>Return on EV</b>	<b>-2.7%</b>	<b>10.9%</b>	

In Italy, the EV moves from 10,341mln to 9,681mln.

The operating experience variance included in the operating EV earnings amounts to -19mln, affected by small deviations on mortality and morbidity (-19mln), expenses (+7mln) and surrenders (-6mln).

The changes in future operating assumptions amount to +22mln mainly come from the revision of surrender and paid-up assumptions (+98mln), followed by a more conservative assumption change regarding expenses (-78mln).

Other operating variances amount to +452mln, mainly including the impact of the new ESG interest volatility model (+184mln) and some enhancements of the actuarial platform (+269mln).

As a result, **operating EV earnings** amount to 1,576mln, while normalised operating earnings (which exclude the other operating variances) are equal to 1,125mln and lead to a normalised operating return on EV of 10.9%.

The **economic variances** amount to -1,857mln and mainly came from the impact on VIF (-1,917mln) that suffers from the widening of the Italian government bond spread.

The following table shows 2016 and 2015 VIF details:

#### *Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)*

	2016	2015
PVFP before Time Value of FG&O	7,489	8,371
Time Value of FG&O	-1,332	-1,138
PVFP after Time Value of FG&O	6,156	7,233
Cost of Capital	-25	-9
Cost of NHR	-345	-308
<b>Value In-Force</b>	<b>5,786</b>	<b>6,917</b>

It is notable that the PVFP before Time Value of FG&O has been affected by the widening of the government spread and the interest rate decrease, while the Time Value of FG&O increase suffered also from the widening of the volatility.

As a result, **total EV earnings** amount to -281mln, with an overall return on EV equal to -2.7%.

The capital movement (-377mln) refers to dividends paid in 2016 by the covered business out of the consolidation perimeter (-841mln), and to capital injections and changes in covered companies' interest in other Group companies (+464mln), leading the total EV at year-end 2016 before Solvency II Contract boundaries adjustment to 9,681mln.

In Italy, according to Solvency II framework, contract boundaries do not have any impact.

### **New Business (€ mln) - Italy**

	2016	2015	Change
<b>APE</b>	<b>2,129</b>	<b>2,322</b>	<b>-8.3%</b>
Annual premiums	1,037	1,066	-2.7%
Single premiums	10,922	12,557	-13.0%
PVNBP	19,758	21,381	-7.6%
<b>NBV</b>	<b>579</b>	<b>589</b>	<b>-1.8%</b>
Profitability on APE	27.2%	25.4%	+1.8 pts
Profitability on PVNBP	2.9%	2.8%	+0.2 pts

*changes are on a comparable basis*

	2016	2015
<b>1st year NB strain</b>	<b>-649</b>	<b>-774</b>
o/w industrial strain	-436	-463
o/w capital strain	-213	-311
1st year NB strain on PVNBP	-3.3%	-3.6%
o/w industrial strain on PVNBP	-2.2%	-2.2%
o/w capital strain on PVNBP	-1.1%	-1.5%
<b>IRR</b>	<b>18.1%</b>	<b>15.6%</b>
<b>Payback period (yrs)</b>	<b>5.3</b>	<b>5.6</b>

### *Movement of NBV (€ mln) and NBM (%)*

	NBV	NBM
<b>New Business Value 2015</b>	<b>589</b>	<b>25.4%</b>
Change in perimeter	0	0.0%
Exchange rate fluctuation	0	0.0%
Products mix/volume	-15	1.6%
Profitability	4	0.2%
<b>New Business Value 2016</b>	<b>579</b>	<b>27.2%</b>

### *Breakdown of New Business Value (€ mln)*

	2016	2015
PVFP before Time Value of FG&O	943	921
Time Value of FG&O	-306	-256
PVFP after Time Value of FG&O	637	665
Cost of Capital	-21	-25
Cost of NHR	-38	-51
<b>New Business Value</b>	<b>579</b>	<b>589</b>

**APE** declined (-8.3%), as a result of the decrease of both annual (-2.7%) and single premiums (-13.0%). This effect is mainly explained by the overall negative and unstable financial market situation of the year that has negatively affected the collection of hybrid single premiums. In terms of lines of business both saving and unit linked business decrease respectively by -6.4% and -18.8% while protection business increased by +14.6%.

Good improvement of the new business **profitability**, with the margin on APE moving from 25.4% in 2015 to 27.2% in 2016. The further reduction of the guarantees offered to the policyholder (from 0.42% at YE15 to 0.26% at YE16), the effect of steering the business mix into more profitable unit linked business (margin on APE at 61.9% driven by new hybrid products) and the increase of protection production, has improved the profitability despite the challenging financial environment. In addition, also the tax rate modification valid from 2017 (from 34.3% to 30.8%) and the impact of the 2016 Required Capital Solvency II alignment (+0.5%) have smoothed the deterioration of economic assumptions.

The total new business strain amounts to -649mln, corresponding to the sum of the negative contribution to profit in the year of sale (-436mln) and the capital absorbed by the new production (-213mln). The lower contribution to profit and to capital strain in the year of sale, driven by a better product mix and by the Required Capital Solvency II adoption, leads to a reduction of new business strain (from -3.6% in 2015 to -3.3% in 2016, expressed in terms of ratio on present value of future premiums) contributing to 2.5% improvement of the internal rate of return (from 15.6% in 2015 to 18.1% in 2016).

## 4.2 FRANCE

**Movement of Embedded Value (€ mln) - France**

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>6,499</b>	<b>2,521</b>	<b>3,978</b>
Change in perimeter	-4	-2	-3
Exchange rate fluctuation	0	0	0
<b>Adjusted Value at 31/12/2015</b>	<b>6,495</b>	<b>2,519</b>	<b>3,975</b>
New business value	90	245	-154
Expected contribution (reference rate)	68	54	14
Expected contribution (in excess of reference rate)	15	15	0
Transfers from VIF to ANAV	0	-329	329
Operating experience variances	1,040	1,029	11
Operating assumption changes	142	142	0
Other operating variances	-297	-239	-59
<b>Operating EV earnings</b>	<b>1,059</b>	<b>917</b>	<b>141</b>
Economic variances	-476	-612	136
Other non operating variances	0	0	0
<b>Total EV earnings</b>	<b>583</b>	<b>306</b>	<b>277</b>
Capital movement	-118	0	-118
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>6,960</b>	<b>2,825</b>	<b>4,135</b>
Solvency II Contract Boundaries application	-750	-750	0
<b>Value at 31/12/2016</b>	<b>6,210</b>	<b>2,075</b>	<b>4,135</b>
	Total	Normalised Operating	
EV earnings	583	1,356	
<b>Return on EV</b>	<b>9.0%</b>	<b>20.9%</b>	

In France, the EV moves from 6,499mln to 6,210mln.

The operating experience variance included in the operating EV earnings amounts to +1,040mln, mostly driven by the revision of contractual guaranteed conditions, both rates and mortality, on Pension products (+1,013mln).

The changes in the future operating assumptions amount to +142mln mainly on account of the more favourable assumptions on mortality and morbidity, the revised Loss Ratio assumptions used for Protection Business projection (+125mln) and on future expenses (+32mln) only partially offset by more conservative assumptions on lapses (-15mln).

Other operating variances on EV amount to -297mln and include the impact of the new ESG interest volatility model (-289mln) and some minor refinements of the actuarial projection models (+45mln).

As a result, **operating EV earnings** amount to 1,059mln, while normalised operating earnings (which exclude the other operating variances) amount to 1,356mln, with a corresponding normalised operating return on EV of 20.9%.

The **economic variances** amount to negative 476mln, mainly driven by the negative impact on VIF (-612mln), as a consequence of the worsening economic situation (-810mln), where the lower interest rates environment together with the increased interest volatility considerably impacted the long-tailed pension business partially offset by the allowance for the future progressive reduction of ordinary taxation level (+198mln).

The increased volatility significantly impacted the cost of financial guarantees and options, as reported in the following table:

**Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	3,466	3,388
Time Value of FG&O	-892	-281
PVFP after Time Value of FG&O	2,575	3,107
Cost of Capital	-79	-130
Cost of NHR	-421	-456
<b>Value In-Force</b>	<b>2,075</b>	<b>2,521</b>

**Total EV earnings** amount to +583mln, with an overall return on EV equal to +9.0%.

The capital movement (-118mln) refers to changes in covered companies' interest in other Group companies, leading the total EV at year-end 2016 before Solvency II Contract Boundaries adjustment to 6,960mln.

The Solvency Contract Boundaries application materially reduces the protection portfolio valuation of 750mln, leading the total EV at year-end 2016 to 6,210mln.

**New Business (€ mln) - France**

	2016	2015	Change		2016	2015
<b>APE</b>	<b>939</b>	<b>944</b>	<b>-0.4%</b>	<b>1st year NB strain</b>	<b>-207</b>	<b>-359</b>
Annual premiums	445	404	10.2%	o/w industrial strain	-154	-139
Single premiums	4,944	5,403	-8.4%	o/w capital strain	-52	-220
PVNBP	9,074	7,963	14.1%	1st year NB strain on PVNBP	-2.3%	-4.5%
<b>NBV</b>	<b>90</b>	<b>62</b>	<b>37.0%</b>	o/w industrial strain on PVNBP	-1.7%	-1.7%
Profitability on APE	9.6%	6.5%	+2.6 pts	o/w capital strain on PVNBP	-0.6%	-2.8%
Profitability on PVNBP	1.0%	0.8%	+0.2 pts	<b>IRR</b>	<b>5.0%</b>	<b>4.9%</b>
<i>changes are on a comparable basis</i>				<b>Payback period (yrs)</b>	<b>11.5</b>	<b>12.9</b>

**Movement of NBV (€ mln) and NBM (%)**

	NBV	NBM
<b>New Business Value 2015</b>	<b>62</b>	<b>6.5%</b>
Change in perimeter	4	0.5%
Exchange rate fluctuation	0	0.0%
Products mix/volume	13	1.4%
Profitability	12	1.3%
<b>New Business Value 2016</b>	<b>90</b>	<b>9.6%</b>

**Breakdown of New Business Value (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	151	192
Time Value of FG&O	-21	-81
PVFP after Time Value of FG&O	130	111
Cost of Capital	-10	-18
Cost of NHR	-30	-31
<b>New Business Value</b>	<b>90</b>	<b>62</b>

**APE** remains quite stable (-0.4%) on account of the progression of regular premium production (+10.2%, representing 47.3% of APE from 42.8%), and the regression of single premiums (-8.4%). In terms of business lines, saving business and unit linked business show a decrease (-11.8% and -5.9%, respectively), whereas protection business a remarkable increase (+21.7%, with a weight on APE of 36.9%).

The new business **profitability** increases from 6.5% in 2015 to 9.6% in 2016, thanks to the more profitable business mix and to the improved profitability of Protection business (margin on APE from 13.2% to 25.2%) on account of the improved operating experience and new product developed in accordance of the ANI ("Accord National Interprofessionnel") local regulation. The 2016 NBV doesn't take yet into account the future progressive reduction of ordinary taxation that would have impacted the profitability of about 2.5%. The 2016 new business value increases by 37.0% and amounts to 90mln.

The 2016 new business strain amounts to -207mln, corresponding to the sum of the negative contribution to profit in the year of sale (-154mln) and the strong reduction of capital absorbed by the new business (-52mln) following the new definition of Required Capital. This leads, in terms of ratio on the present value of new business premiums, from 2015 to 2016 to a decrease from -4.5% to -2.3% of the first year strain. The IRR remains quite stable, from 4.9% in 2015 to 5.0% 2016 while the pay-back slightly decreases from 12.9 years to 11.5 years.

## 4.3 GERMANY

**Movement of Embedded Value (€ mln) - Germany**

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>5,439</b>	<b>4,237</b>	<b>1,202</b>
Change in perimeter	0	0	0
Exchange rate fluctuation	0	0	0
<b>Adjusted Value at 31/12/2015</b>	<b>5,439</b>	<b>4,237</b>	<b>1,202</b>
New business value	275	315	-40
Expected contribution (reference rate)	62	61	1
Expected contribution (in excess of reference rate)	-24	-24	0
Transfers from VIF to ANAV	0	-159	159
Operating experience variances	97	56	41
Operating assumption changes	205	205	0
Other operating variances	-157	-157	0
Operating EV earnings	457	296	161
Economic variances	-73	-136	64
Other non operating variances	0	0	0
Total EV earnings	384	159	225
Capital movement	-62	0	-62
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>5,761</b>	<b>4,396</b>	<b>1,365</b>
Solvency II Contract Boundaries application	3	3	0
<b>Value at 31/12/2016</b>	<b>5,764</b>	<b>4,399</b>	<b>1,365</b>

	Total	Normalised Operating
EV earnings	384	614
<b>Return on EV</b>	<b>7.1%</b>	<b>11.3%</b>

In Germany, the EV moves from 5,439mln to 5,764mln.

The operating experience variance included in the operating EV earnings amounts to +97mln, mostly driven by the positive impact on lapses (+101mln).

The changes in the operating assumptions amount to +205mln and mainly come from a revision of projected expenses (+86mln), profit sharing (+81mln) and assumptions on lapses (+76mln) only partially offset by modifications of assumptions on renewals (-20mln) and mortality assumptions (-9mln).

Other operating variances amount to -157mln, explained by the enhancement of the actuarial projection models to improve the consistency with Solvency II environment (-236mln), only partially offset by the positive impact on VIF of the new ESG interest volatility model (+68mln).

As a result, **operating EV earnings** amount to 457mln, while normalised operating earnings (which exclude the other operating variances) amount to 614mln and lead to a normalised operating return on EV of 11.3%.

The **economic variances** amount to -73mln and mainly arises from the impact on VIF (-136mln, partially mitigated from the positive variance coming from the health business) explained by the decrease of the reference rates that, together with the increase of interest rate volatilities, determine an increase of the cost of options and guarantees, as reported in the table below.

The following table shows 2016 and 2015 VIF details:

<b>Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)</b>		
	2016	2015
PVFP before Time Value of FG&O	5,009	4,749
Time Value of FG&O	-113	-58
PVFP after Time Value of FG&O	4,897	4,691
Cost of Capital	-37	-42
Cost of NHR	-460	-412
<b>Value In-Force</b>	<b>4,399</b>	<b>4,237</b>

**Total EV earnings** amount to 384mln, with an overall return on EV equal to 7.1%.

The capital movement (-62mln) refers to dividends paid in 2016 by the covered business out of the consolidation perimeter (-217mln), and to capital injections and changes in covered companies' interest in other Group companies (+155mln), leading the total EV at year-end 2016 before Solvency II contract boundaries adjustment to 5,761mln.

The Solvency II Contract Boundaries application has slightly positive impacted the VIF by 3mln, leading the total EV at year-end 2016 to 5,764mln.

### **New Business (€ mln) - Germany**

	2016	2015	Change		2016	2015
<b>APE</b>	<b>708</b>	<b>826</b>	<b>-14.2%</b>	<b>1st year NB strain</b>	<b>-40</b>	<b>-89</b>
Annual premiums	502	532	-5.8%	o/w industrial strain	-40	-54
Single premiums	2,069	2,940	-29.6%	o/w capital strain	0	-35
PVNBP	9,447	10,522	-10.2%	1st year NB strain on PVNBP	-0.4%	-0.8%
<b>NBV</b>	<b>275</b>	<b>191</b>	<b>44.3%</b>	o/w industrial strain on PVNBP	-0.4%	-0.5%
Profitability on APE	38.8%	23.1%	+15.7 pts	o/w capital strain on PVNBP	0.0%	-0.3%
Profitability on PVNBP	2.9%	1.8%	+1.1 pts	<b>IRR</b>	<b>30.1%</b>	<b>9.7%</b>
<i>changes are on a comparable basis</i>				<b>Payback period (yrs)</b>	<b>3.3</b>	<b>10.2</b>

#### *Movement of NBV (€ mln) and NBM (%)*

	NBV	NBM
<b>New Business Value 2015</b>	<b>191</b>	<b>23.1%</b>
Change in perimeter	0	0.0%
Exchange rate fluctuation	0	0.0%
Products mix/volume	-2	3.6%
Profitability	86	12.1%
<b>New Business Value 2016</b>	<b>275</b>	<b>38.8%</b>

#### *Breakdown of New Business Value (€ mln)*

	2016	2015
PVFP before Time Value of FG&O	309	294
Time Value of FG&O	-7	-58
PVFP after Time Value of FG&O	302	236
Cost of Capital	0	-18
Cost of NHR	-27	-28
<b>New Business Value</b>	<b>275</b>	<b>191</b>

**APE** declines (-14.2%), as a consequence of the decrease of life business (-14.9%) and the increase of health production (+3.4%). In aggregate, 2016 regular premiums (-5.8%) increase their weight on total APE from 64.4% to 70.8% as a consequence of the strong reduction in volume of single premiums (-29.6%). In terms of lines of business, saving business (-34.9%) has been intentionally reduced and its weight is now, for the first time ever, below 30% (29.8%). Unit linked business (+1.9%) and protection business (-3.7%) now represent the most sold products, respectively with a weight of 37.2% and 32.9%.

The improved business composition, associated with the remarkable profitability of protection (NBM at 77.0%) and unit linked (NBM at 24.7%), together with products refinements, lead to an overall increase of the new business **profitability**, with the margin moving from 23.1% to 38.8% (+0.9% coming from 2016 Required Capital Solvency II alignment).

Despite the lower volumes, the higher margins explain the increase of NBV (+44.3% on a comparable basis), amounting to 275mln.

The total new business strain (lower in percentage of present value of premiums than in other countries thanks to the use of Zillmerised reserves) amounts to -40mln, corresponding to the negative contribution to profit in the year of sale (-40mln). The reduced strain (from -0.8% in 2015 to -0.4% in 2016, in terms of ratio on the present value of new business premiums) and the higher profitability explain the internal rate of return increase from 9.7% in 2015 to 30.1% in 2016, and the decrease of the pay-back period from 10.2 years to 3.3 years.

## 4.4 CENTRAL AND EASTERN EUROPE

***Movement of Embedded Value (€ mln) - Central and Eastern Europe***

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>1,644</b>	<b>1,135</b>	<b>509</b>
Change in perimeter	-4	0	-4
Exchange rate fluctuation	-1	-1	-1
<b>Adjusted Value at 31/12/2015</b>	<b>1,639</b>	<b>1,134</b>	<b>504</b>
New business value	47	136	-89
Expected contribution (reference rate)	18	13	5
Expected contribution (in excess of reference rate)	14	14	0
Transfers from VIF to ANAV	0	-242	242
Operating experience variances	37	38	-1
Operating assumption changes	33	33	0
Other operating variances	22	16	6
<b>Operating EV earnings</b>	<b>171</b>	<b>9</b>	<b>162</b>
Economic variances	-24	-74	51
Other non operating variances	0	0	0
<b>Total EV earnings</b>	<b>148</b>	<b>-66</b>	<b>213</b>
Capital movement	-16	0	-16
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>1,770</b>	<b>1,069</b>	<b>701</b>
Solvency II Contract Boundaries application	-358	-358	0
<b>Value at 31/12/2016</b>	<b>1,412</b>	<b>711</b>	<b>701</b>

	Total	Normalised Operating
EV earnings	148	150
<b>Return on EV</b>	<b>9.0%</b>	<b>9.1%</b>

In Central and Eastern Europe, the EV moves from 1,644 mln to 1,412mln.

Opening adjustments on EV (-5 mln) reflect minor movements in the Life EV perimeter and the weakening of the currencies of the region (mainly Poland Zloty) against Euro partially offset by the strengthening of the Hungary Forint currency.

The operating experience variances included in the operating EV earnings amount to 37mln, driven mostly by the positive impact on surrenders (+33mln), mainly in Czech Republic.

The changes in the operating assumptions amount to 33mln, as a combined effect of surrenders (+35mln), mortality and morbidity (+10mln) and higher expenses (-12mln) basically in Czech Republic.

Other operating variances amount to +22mln and include model refinements (+26mln), the impact of extraordinary expenses (-7mln) and minor residual variances (+3mln).

As a result, **operating EV earnings** amount to 171mln, while normalised operating earnings (which exclude the other operating variances) are 150mln and lead to a normalised operating return on EV of 9.1%.

The **economic variances** amount to -24mln, mainly coming from VIF impact (-74mln) due to the reduction of reference rates. The variance is also affected by the change of some local ordinary taxation in the region in particular in Hungary and in Poland.

The following table shows 2016 and 2015 VIF details:

**Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	762	1,189
Time Value of FG&O	-12	-18
PVFP after Time Value of FG&O	750	1,171
Cost of Capital	-3	-2
Cost of NHR	-37	-33
<b>Value In-Force</b>	<b>711</b>	<b>1,135</b>

As a result, **total EV earnings** amount to +148mln, with an overall return on EV equal to 9.0%.

The capital movement (-16mln) refers to dividends paid in 2016 by the covered business out of the consolidation perimeter (-110mln), and to capital injections and changes in covered companies' interest in other Group companies (+94mln), leading the total EV at year-end 2016 before Solvency II contract boundaries adjustment to 1,770mln.

The Solvency II Contract Boundaries application (-358mln) impacts mainly protection riders products in Czech Republic (-271mln), leading the total EV at year-end 2016 to 1,412mln.

**New Business (€ mln) - Central and Eastern Europe**

	2016	2015	Change		2016	2015
<b>APE</b>	<b>136</b>	<b>165</b>	<b>-16.8%</b>	<b>1st year NB strain</b>	<b>-93</b>	<b>-120</b>
Annual premiums	122	140	-12.2%	o/w industrial strain	-89	-102
Single premiums	137	246	-43.3%	o/w capital strain	-4	-17
PVNBP	753	897	-15.3%	1st year NB strain on PVNBP	-12.3%	-13.3%
<b>NBV</b>	<b>47</b>	<b>39</b>	<b>21.2%</b>	o/w industrial strain on PVNBP	-11.8%	-11.4%
Profitability on APE	34.8%	23.7%	+10.9 pts	o/w capital strain on PVNBP	-0.5%	-1.9%
Profitability on PVNBP	6.3%	4.3%	+2.0 pts	<b>IRR</b>	<b>11.8%</b>	<b>8.0%</b>
<i>changes are on a comparable basis</i>				<b>Payback period (yrs)</b>	<b>5.1</b>	<b>6.7</b>

**Movement of NBV (€ mln) and NBM (%)**

	NBV	NBM
<b>New Business Value 2015</b>	<b>39</b>	<b>23.7%</b>
Change in perimeter	0	0.0%
Exchange rate fluctuation	0	0.2%
Products mix/volume	-4	2.1%
Profitability	12	8.8%
<b>New Business Value 2016</b>	<b>47</b>	<b>34.8%</b>

**Breakdown of New Business Value (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	59	50
Time Value of FG&O	0	0
PVFP after Time Value of FG&O	59	49
Cost of Capital	-1	-2
Cost of NHR	-10	-9
<b>New Business Value</b>	<b>47</b>	<b>39</b>

**APE** decreases (-16.8% on a comparable basis), mainly due to Czech Republic (-30.9%), where the production of all the lines of business decreases, and Poland (-27.2%) where Unit Linked business reduces by 28.3% as a consequence of regulatory changes that negatively influenced the production.

In term of type of premiums, the decrease is mainly driven by the significant Single Premiums reduction (-44.3%) but also by the slow down of Regular Premiums (-12.2%), representing in 2016 the 90% of the production.

The **profitability** improves from 23.7% to 34.8% mainly on account of the increase of the protection business weight (from 49.2% to 56.9%) that represents the most profitable business line in the area (NBM 48.4% in 2016). Despite the reduced volume, the improved marginality explains the increase of NBV (+21.5% on a comparable basis), amounting to 47mln.

The total new business strain amounts to -93mln, corresponding to the sum of the negative contribution coming from the profit in the year of sale (-89mln) and from the capital required by the new business (-4mln). The positive effect of a lower strain (from -13.3% to -12.3%, in terms of present value of new business premiums) is mainly driven by the new approach on required capital (from -1.9% to -0.5%) leading to an improvement on both the internal rate of return and the payback period.

## 4.5 EUROPE MIDDLE EAST AND AFRICA

**Movement of Embedded Value (€ mln) - EMEA**

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>5,439</b>	<b>2,551</b>	<b>2,889</b>
Change in perimeter	0	0	0
Exchange rate fluctuation	22	12	9
<b>Adjusted Value at 31/12/2015</b>	<b>5,461</b>	<b>2,563</b>	<b>2,898</b>
New business value	212	337	-125
Expected contribution (reference rate)	26	6	20
Expected contribution (in excess of reference rate)	218	218	0
Transfers from VIF to ANAV	0	-480	480
Operating experience variances	28	27	1
Operating assumption changes	46	46	0
Other operating variances	159	222	-64
Operating EV earnings	689	377	312
Economic variances	-402	-563	161
Other non operating variances	0	0	0
Total EV earnings	287	-186	473
Capital movement	-181	0	-181
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>5,567</b>	<b>2,377</b>	<b>3,190</b>
Solvency II Contract Boundaries application	-463	-463	0
<b>Value at 31/12/2016</b>	<b>5,105</b>	<b>1,915</b>	<b>3,190</b>
	Total	Normalised Operating	
EV earnings	287	531	
<b>Return on EV</b>	<b>5.3%</b>	<b>9.7%</b>	

In Europe Middle East and Africa, the EV moves from 5,439mln to 5,105mln.

Opening adjustments on EV (+22mln) reflect the strengthening of Swiss Francs (+26mln) and the weakening of United Kingdom Pounds against Euro (-4mln).

The operating experience variance included in the operating EV earnings amounts to +28mln. The positive impact mostly comes from positive repricing management actions (+44mln), mainly thanks to Austrian health business portfolio, and from profit sharing (+10mln, mainly in Austria and Belgium), while the negative impact comes from the deviation for lapses (-28mln, mainly in Netherlands, Switzerland and Austria).

The changes in the future operating assumptions amount to +46mln, with the effect of the more favourable assumptions on surrenders (+25mln, mainly in Spain) and mortality (+13mln, where positive deviations in Austria and Switzerland offset a negative deviation in Spain).

Other operating variances amount to +159mln and include +254mln of model refinements, mainly coming from the health with profit business in Austria (+147mln).

As a result, **operating EV earnings** amount to 689mln, while normalised operating earnings (which exclude the other operating variances) equal to 531mln and lead to a normalised operating return on EV of 9.7%.

The **economic variances** amount to -402mln and come from negative impact on VIF (-563mln) due to the fall of interest rates only partially offset by the positive impact on ANAV (+161mln). Such negative impact on EV is particularly relevant in Switzerland (-177mln) and Austria (-101mln), characterized by high level of guarantees.

The following table shows 2016 and 2015 VIF details:

**Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	2,950	3,561
Time Value of FG&O	-488	-528
PVFP after Time Value of FG&O	2,462	3,032
Cost of Capital	-64	-54
Cost of NHR	-484	-428
<b>Value In-Force</b>	<b>1,915</b>	<b>2,551</b>

The **total EV earnings** amounting to 287mln, with an overall return on EV equal to 5.3%.

The capital movement (-181mln) refers to dividends paid in 2016 by the covered business out of the consolidation perimeter (-117mln), and to capital injections and changes in covered companies' interest in other Group companies (-64mln), leading the total EV at year-end 2016 before Solvency II contract boundaries application to 5,567mln.

The Solvency II Contract Boundaries adjustment amount to negative 463mln, mainly coming from Spain (-153mln) and Belgium (-123mln). As a consequence total EV at year-end 2016 is 5,105mln.

**New Business (€ mln) - EMEA**

	2016	2015	Change		2016	2015
<b>APE</b>	<b>544</b>	<b>645</b>	<b>-15.4%</b>	<b>1st year NB strain</b>	<b>-159</b>	<b>-178</b>
Annual premiums	304	358	-14.5%	o/w industrial strain	-125	-128
Single premiums	2,396	2,875	-16.6%	o/w capital strain	-34	-50
PVNBP	5,436	6,200	-12.0%	1st year NB strain on PVNBP	-2.9%	-2.9%
<b>NBV</b>	<b>212</b>	<b>174</b>	<b>23.3%</b>	o/w industrial strain on PVNBP	-2.3%	-2.1%
Profitability on APE	39.0%	27.0%	+12.3 pts	o/w capital strain on PVNBP	-0.6%	-0.8%
Profitability on PVNBP	3.9%	2.8%	+1.1 pts	<b>IRR</b>	<b>16.8%</b>	<b>14.7%</b>
<i>changes are on a comparable basis</i>				<b>Payback period (yrs)</b>	<b>5.0</b>	<b>5.3</b>

**Movement of NBV (€ mln) and NBM (%)**

	NBV	NBM
<b>New Business Value 2015</b>	<b>174</b>	<b>27.0%</b>
Change in perimeter	0	0.0%
Exchange rate fluctuation	-2	-0.2%
Products mix/volume	27	9.9%
Profitability	13	2.4%
<b>New Business Value 2016</b>	<b>212</b>	<b>39.0%</b>

**Breakdown of New Business Value (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	305	274
Time Value of FG&O	-16	-48
PVFP after Time Value of FG&O	289	227
Cost of Capital	-4	-7
Cost of NHR	-73	-46
<b>New Business Value</b>	<b>212</b>	<b>174</b>

On a comparable basis **APE** declines by 15.4%, as a consequence of the planned reduction of saving business products, mainly in Austria (-19.1%), in Switzerland (-25.5%), in Guernsey (-49.8%) and in Ireland (-23.7%). On the other hand, it should be noted the good progressions in Belgium (+48.7%), thanks to successful commercial actions, and in Spain (+10.0%).

Single premiums decrease mainly in Ireland (-27.2%), Austria (-53.4%), Switzerland (-79.1%) and Guernsey (-23.1%). Regular premiums decline in Guernsey (-64.0%), Switzerland (-18.1%) and Austria (-9.3%), whereas an improvement is recorded in Spain (+10.3%).

In terms of main business lines, it's worth mentioning the improve in protection business (+6.0%) mostly driven by the increase in Greece (+73.3%), Switzerland (+20.8%) and UK (+22.8%).

The **profitability** increases from 27.0% in 2015 to 39.0% in 2016, thanks to the Group steering actions that reduced the weight of Saving business products (from 33.4% to 29.6%) and consequently increased the weight of the profitable protection business (weight on APE from 16.8% to 20.8%) with higher margins on APE (142.3% in 2016, 146.6% in 2015).

The higher margins lead to an increase of NBV (+23.3% on a comparable basis), amounting to 212mln.

The total new business strain amounts to -159mln, corresponding to the sum of the negative contribution coming from the profit in the year of sale (-125mln) and from the capital absorbed by the new business (-34mln). The stable new business strain (in terms of present value of new business premiums stable at (-2.9%), associated to an higher profitability improves the internal rate of return (from 14.7% to 16.8%) and reduces the pay-back (from 5.3 years to 5.0 years).

## 4.6 LATIN AMERICA AND ASIA

***Movement of Embedded Value (€ mln) - Lat.Am.&Asia***

	EV	VIF	ANAV
<b>Value at 31/12/2015</b>	<b>772</b>	<b>245</b>	<b>527</b>
Change in perimeter	9	-10	19
Exchange rate fluctuation	0	2	-2
<b>Adjusted Value at 31/12/2015</b>	<b>781</b>	<b>237</b>	<b>544</b>
New business value	53	128	-76
Expected contribution (reference rate)	19	10	9
Expected contribution (in excess of reference rate)	8	8	0
Transfers from VIF to ANAV	0	-42	42
Operating experience variances	7	3	4
Operating assumption changes	6	6	0
Other operating variances	31	29	2
<b>Operating EV earnings</b>	<b>124</b>	<b>142</b>	<b>-18</b>
Economic variances	-16	18	-34
Other non operating variances	10	-36	46
<b>Total EV earnings</b>	<b>118</b>	<b>124</b>	<b>-6</b>
Capital movement	107	0	107
<b>Value at 31/12/2016 before Solvency II C.B. adj.</b>	<b>1,006</b>	<b>361</b>	<b>645</b>
Solvency II Contract Boundaries application	-18	-18	0
<b>Value at 31/12/2016</b>	<b>988</b>	<b>343</b>	<b>645</b>
	Total	Normalised Operating	
EV earnings	118	93	
<b>Return on EV</b>	<b>15.1%</b>	<b>11.9%</b>	

In Latin America and Asia, the EV moves from 772mln to 988mln.

Opening adjustments on EV (+9mln) reflect the exclusion from the Life EV perimeter of a company in the Philippines and the inclusion of a life new company based in Hong Kong.

The operating experience variance included in the operating EV earnings amounts to 7mln, as a combined effect of the unfavourable deviations on surrenders (-4mln), expenses (-3mln) and reinsurance (-2mln) more than offset by favourable deviations on profit sharing (+11mln) and mortality (+6mln).

The changes in the future operating assumptions amount to 6mln, mainly coming from the positive revision of expenses.

Other operating variances (+31mln) are explained by some refinements to the actuarial model.

As a result, **operating EV earnings** amount to 124mln, while normalised operating earnings (which exclude the other operating variances) equal to 93mln, leading to a normalised operating return on EV of 11.9%.

The **economic variances** amount to -16mln, with the negative impact on ANAV (-34mln) being partially offset by the positive impact of higher interest rates on VIF (+18mln), whose details are reported below (in Asia, with the only exception of China, traditional EV methodology is applied while, due to the small size of the companies, no VIF is associated to Latin America business).

The following table shows 2016 and 2015 VIF details:

**Breakdown of value in-force as at 31 December 2016 and 2015 (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	428	311
Time Value of FG&O	-1	-16
PVFP after Time Value of FG&O	426	294
Cost of Capital	-40	-20
Cost of NHR	-43	-29
<b>Value In-Force</b>	<b>343</b>	<b>245</b>

**Total EV earnings** amount to 118mln, with an overall return on EV equal to 15.1%.

The capital movement (+107mln) refers to dividend paid in 2016 by the covered business out of the consolidation perimeter (-22mln), and capital injections and changes in covered companies' interest in other Group companies (+129mln), leading the total EV at year-end 2016 before Solvency II adjustment to 1,006mln.

The Solvency II Contract Boundaries impact is -18mln. As a consequence total EV at year-end 2016 is 988mln.

**New Business (€ mln) - Lat.Am.&Asia**

	2016	2015	Change		2016	2015
<b>APE</b>	<b>391</b>	<b>308</b>	<b>32.8%</b>	<b>1st year NB strain</b>	<b>-128</b>	<b>-124</b>
Annual premiums	314	253	29.5%	o/w industrial strain	-76	-85
Single premiums	764	548	47.8%	o/w capital strain	-53	-40
PVNBP	1,696	1,332	32.4%	1st year NB strain on PVNBP	-7.6%	-9.3%
<b>NBV</b>	<b>53</b>	<b>42</b>	<b>33.2%</b>	o/w industrial strain on PVNBP	-4.5%	-6.3%
Profitability on APE	13.5%	13.5%	+0.0 pts	o/w capital strain on PVNBP	-3.1%	-3.0%
Profitability on PVNBP	3.1%	3.1%	0.0 pts	<b>IRR</b>	<b>16.5%</b>	<b>12.3%</b>
<i>changes are on a comparable basis</i>				<b>Payback period (yrs)</b>	<b>5.0</b>	<b>7.3</b>

**Movement of NBV (€ mln) and NBM (%)**

	NBV	NBM
<b>New Business Value 2015</b>	<b>42</b>	<b>13.5%</b>
Change in perimeter	0	0.3%
Exchange rate fluctuation	-2	-0.4%
Products mix/volume	7	-1.5%
Profitability	6	1.5%
<b>New Business Value 2016</b>	<b>53</b>	<b>13.5%</b>

**Breakdown of New Business Value (€ mln)**

	2016	2015
PVFP before Time Value of FG&O	70	70
Time Value of FG&O	-5	0
PVFP after Time Value of FG&O	65	70
Cost of Capital	-9	-28
Cost of NHR	-3	0
<b>New Business Value</b>	<b>53</b>	<b>42</b>

**APE** shows positive developments in all countries of the Area driven by the continuing positive trend in China (+50.4%) and Indonesia (+29.9%) and the very good production in Hong Kong thanks to a new attractive product. In general, all main business lines registered a remarkable progression. The overall weight of protection business increases from 27.0% in 2015 to 30.0% in 2016, is mainly explained by the significant increase of protection sale in China (+40.1%).

The **new business profitability** remains stable at 13.5%; the improvements of protection business profitability (from 18.9% to 22.5%) and of unit linked (from 22.7% to 34.9%) has compensated the decrease of saving products profitability (from 8.7% to 3.9%).

The NBV increases on a comparable basis by 33.2%, and amounts to 53mln, thanks to the higher volumes (+32.8% on APE).

The reduced strain (from -9.3% in 2015 to -7.6% in 2016, in terms of ratio on the present value of new business premiums) and the higher profitability explain the internal rate of return increase from 12.3% in 2015 to 16.5% in 2016, and the decrease of the pay-back period from 7.3 years to 5.0 years.

## 5 Sensitivity analysis

The following tables show the sensitivities of the EV to changes in key assumptions using the parameters indicated by the CFO Forum.

- **Yield curve +0.5%:** sensitivity to an upward shift of 50 basis points in the underlying reference rates, accompanied by an upward shift of 50 basis points in all other dependent economic assumptions. Volatility adjustment added to swap rates until the extrapolation “entry-point” remains the same as in the central scenario<sup>1</sup>.
- **Yield curve -0.5%:** sensitivity to a downward parallel shift of 50 basis points in the underlying reference rates, accompanied by a downward shift of 50 basis points in all other dependent economic assumptions. Volatility adjustment added to swap rates until the extrapolation “entry-point” remains the same as in the central scenario<sup>1</sup>. Interest rates are not floored to zero.
- **Equity Value +10%:** sensitivity to a 10% market value increase at valuation date for equity investments.
- **Equity Value -10%:** sensitivity to a 10% market value reduction at valuation date for equity investments.
- **Property Value -10%:** sensitivity to a 10% market value reduction at valuation date for property investments.
- **Equity Implied Volatilities +25%:** sensitivity to a 25% increase of the equity implied volatility across all maturities, resulting in a change of the time value of financial options and guarantees.
- **Swaption Implied Volatilities +25%:** sensitivity to a 25% increase of the swaption implied volatility across all option maturities and swap tenors, resulting in a change of the time value of financial options and guarantees.
- **Reference rates without volatility adjustment (VA):** sensitivity to the adoption of swap rates without any additional adjustment as reference rates.
- **Reference rates with volatility adjustment (VA) +10bps:** sensitivity to a 10bps increase to the volatility adjustment added on top of the underlying reference rates.
- **Administrative & Investment Management expenses -10%:** sensitivity to a 10% decrease of administrative and investment management expenses.
- **Lapse Rate -10%:** sensitivity to a 10% decrease of lapse rates (multiplicative, i.e. 90% of best estimate lapse rates).
- **Lapse Rate +10%:** sensitivity to a 10% increase of lapse rates (multiplicative, i.e. 110% of best estimate lapse rates).
- **Mortality/morbidity for risk business -5%:** sensitivity to a 5% decrease of mortality/morbidity (multiplicative, i.e. 95% of best estimate mortality/morbidity rates), including the effect of possible related re-pricing, for all product lines subject to mortality risk, i.e. where the present value of future profits decreases when the mortality rates increase (e.g. term assurance, whole life, annuity during the accumulation period).
- **Mortality for annuity business -5%:** sensitivity to a 5% decrease of mortality (multiplicative, i.e. 95% of best estimate mortality rates) for business subject to longevity risk, i.e. where the present value of future profits decreases when the mortality rates decrease (e.g. annuities in payment).
- **130% Solvency Capital Requirement:** sensitivity to a modification of the required capital, which is set equal to the 130% of the Risk adjusted capital net of the admitted free coverage.

Each sensitivity test is performed in isolation, i.e. all other assumptions remain unchanged except where they are directly impacted by the changed assumptions.

<sup>1</sup> As the ultimate forward rate used in this sensitivity remains the same as in the central scenario, the shift is parallel only up to the extrapolation entry-point.

**EV sensitivity analysis**

	Total	Italy	France	Germany	CEE	EMEA	Lat.Am.&Asia
Base EV (€ mln)	29,159	9,681	6,210	5,764	1,412	5,105	988
Yield Curve +0,5%	4.7%	4.0%	6.5%	1.8%	0.7%	9.1%	1.4%
Yield Curve -0,5%	-6.5%	-5.3%	-8.9%	-3.6%	-1.1%	-11.3%	-1.7%
Equity Value +10%	2.6%	2.8%	3.6%	0.4%	2.0%	3.2%	4.2%
Equity Value -10%	-2.8%	-3.0%	-4.4%	-0.4%	-2.0%	-3.0%	-4.3%
Property Value -10%	-2.2%	-2.3%	-3.3%	-1.3%	-1.1%	-2.2%	-0.3%
Equity Implied Volatilities +25%	-1.4%	-0.7%	-4.5%	-1.0%	-0.2%	-0.2%	0.0%
Swaption Implied Volatilities +25%	-1.8%	-2.1%	-1.0%	-1.4%	-0.1%	-3.2%	0.0%
Reference rates without volatility adjustment	-4.8%	-6.1%	-6.7%	-3.0%	0.0%	-4.0%	-0.6%
Reference rates with volatility adjustment +10bps	4.0%	4.5%	4.8%	2.9%	0.7%	4.9%	0.8%
Administrative & Invest.Manag. expenses -10%	2.3%	2.3%	2.2%	2.0%	1.9%	3.2%	1.9%
Lapse rate -10%	1.5%	0.5%	1.7%	3.8%	2.0%	0.2%	0.9%
Lapse rate +10%	-1.3%	-0.6%	-1.7%	-3.4%	-1.8%	-0.1%	-0.7%
Mortality/Morbidity for Risk Business -5%	1.0%	0.2%	1.0%	2.1%	0.7%	1.4%	1.2%
Mortality for Annuity Business -5%	-1.0%	-0.2%	-2.0%	-1.3%	-0.1%	-1.4%	-0.2%
130% Solvency Capital Requirement	-0.4%	-0.5%	-0.7%	0.0%	0.0%	-0.5%	-1.7%

The impact of the sensitivity to a 0.5% increase in the yield curve is generally positive, with different magnitudes on account of different weights of businesses with prevalent financial profits proportionally shared with policyholders (which benefit from an increase of interest rates) and businesses with prevalent fixed components of profits ("fee-based" financial margins or technical margins) which are penalised by the corresponding increase in the discount factors.

The impact of the sensitivity to a 0.5% decrease in the yield curve is generally greater than the corresponding opposite variation due to the presence of financial guarantees and options, which are more likely to bite when interest rates are lower and create asymmetries in shareholders' results.

Compared to previous year, the impacts of most economic sensitivities are generally higher due to the worsened financial economic environment underlying the base value: with lower projected returns and higher volatilities, the shareholder takes a higher quota from the profits/losses generated by positive/negative changes of the financial environment.

The following table reports the sensitivity analysis for the new business, the relative impacts on official NBV (sum of the NBV of four quarters, each of them calculated with beginning of period assumptions) have been derived from an additional NBV run based on year end assumptions.

**NBV sensitivity analysis**

	Total	Italy	France	Germany	CEE	EMEA	Lat.Am.&Asia
Base NBV (€ mln)	1,256	579	90	275	47	212	53
Yield Curve +0,5%	4.1%	5.0%	3.2%	1.8%	-2.4%	1.8%	22.5%
Yield Curve -0,5%	-5.1%	-7.6%	-4.5%	-0.2%	1.5%	-1.7%	-22.7%
Equity Value +10%	2.3%	3.8%	5.0%	0.4%	0.2%	0.6%	0.5%
Equity Value -10%	-2.8%	-4.6%	-6.0%	-0.7%	-0.4%	-0.4%	-0.4%
Property Value -10%	-2.5%	-4.3%	-2.0%	-0.7%	-0.8%	-1.0%	0.0%
Equity Implied Volatilities +25%	-1.6%	-2.2%	-5.5%	-0.6%	-0.1%	-0.1%	0.0%
Swaption Implied Volatilities +25%	-3.5%	-6.3%	-1.7%	-0.2%	-0.2%	-2.3%	0.0%
Reference rates without volatility adjustment	-3.8%	-6.7%	-0.6%	-1.6%	-0.4%	-1.5%	-2.3%
Reference rates with volatility adjustment +10bps	3.1%	4.9%	3.1%	0.8%	3.7%	0.9%	3.2%
Administrative & Invest.Manag. expenses -10%	4.9%	4.3%	12.7%	1.4%	8.7%	5.4%	10.9%
Lapse rate -10%	8.1%	2.7%	11.0%	10.5%	17.2%	15.0%	14.4%
Lapse rate +10%	-7.3%	-2.7%	-11.0%	-9.6%	-15.1%	-12.0%	-12.5%
Mortality/Morbidity for Risk Business -5%	2.6%	0.7%	1.2%	2.3%	10.0%	5.4%	9.2%
Mortality for Annuity Business -5%	-0.6%	-0.5%	-2.2%	-0.8%	0.0%	-0.2%	-0.1%

## 6 Assumptions

The calculation of EV makes use of various assumptions with respect to economic conditions, operating conditions, and other factors, many of which are beyond Generali's control. Although all the assumptions represent estimates that Generali regards as reasonable, future developments may vary from those assumed in the calculations and such variations could have a significant impact on future profits.

Economic assumptions have been set consistently with observable market data. Taxation assumptions are based on current tax legislation. Operating assumptions (including profit sharing mechanisms) are based on each company's current experience and practice, where available and otherwise credible.

### 6.1 ECONOMIC ASSUMPTIONS

#### 6.1.1 Financial Assumptions

Generali has adopted a market consistent methodology based on a risk-neutral approach for the vast majority of its business (see Annex B for the assumptions used for minor companies).

The Time Value of FG&O is modelled by means of a set of 1,000 stochastic simulations, calibrated reflecting observable market data as at the valuation date and generated centrally by an application tool provided by Moody's Analytics UK Limited.

At year-end 2016 valuation, consistently with year-end 2015, the nominal yield curves for each considered economy are generated using the Libor Market Model plus (LMM+) economic scenario generator, which allows for scenarios with negative interest rates. Real yield curves are generated with a two-factor Vasicek model. To reduce Monte-Carlo error, antithetic variables are used. Corporate credit spreads are modelled stochastically.

The key economic assumptions for the risk-neutral 2016 valuation are, for each economy:

- the reference rates (swap curve adjusted for credit risk (CRA) as defined by EIOPA);
- the volatility (VA) adjustment;
- the implied volatilities for each asset class;
- the correlations between different asset classes.

#### Reference rates (before application of volatility adjustment)

The reference rates are based on EIOPA curve in all countries: swap rates adjusted for CRA with the exception of Hungary and Poland, where the local swap curve is not considered by EIOPA a robust basis for producing reference rates and the government bond adjusted for CRA rates have been used.

In accordance with EIOPA guidelines, for maturities beyond the last term where the market is deemed to be fully deep, liquid and transparent ("last liquid point"), reference rates have been extrapolated. In particular, starting from the "last liquid point" ("LLP"), reference rates are assumed to gradually converge to a certain ultimate long-term forward rate ("UFR") in a certain number of years (the "convergence period").

The following table summarises Generali's reference rates assumptions for its main currencies.

#### **Reference rates before volatility adjustment at 31 December 2016 - definition**

	Base	LLP	Extrapolation		Method
			UFR	Convergence period	
EUR	Swap (net CRA)	20 yrs	4.20%	40 yrs	Smith-Wilson
CHF	Swap (net CRA)	25 yrs	3.20%	40 yrs	Smith-Wilson
GBP	Swap (net CRA)	50 yrs	4.20%	40 yrs	Smith-Wilson
CZK	Swap (net CRA)	15 yrs	4.20%	45 yrs	Smith-Wilson
HUF	Govt (net CRA)	15 yrs	4.20%	45 yrs	Smith-Wilson

According to the assumptions illustrated above, the par reference rates (adjusted for the CRA) used in the valuation as at 31 December 2016 and 2015 are shown in the following tables for the main currencies.

**Par ref. rates at 31 December 2016 (adj. with CRA) - before application of volatility adjustment**

	1 year	2 year	5 year	10 year	20 year	30 year
EUR (swap)	-0.30%	-0.26%	-0.02%	0.56%	1.08%	1.60%
CHF (swap)	-0.77%	-0.70%	-0.42%	0.05%	0.44%	0.70%
GBP (swap)	0.38%	0.44%	0.69%	1.07%	1.29%	1.25%
CZK (swap)	0.06%	0.14%	0.40%	0.77%	1.28%	1.84%
HUF (govt)	0.26%	0.62%	1.66%	2.91%	3.78%	3.96%

**Par ref. rates at 31 December 2015 (adj. with CRA) - before application of volatility adjustment**

	1 year	2 year	5 year	10 year	20 year	30 year
EUR (swap)	-0.16%	-0.13%	0.23%	0.90%	1.46%	1.91%
CHF (swap)	-0.80%	-0.75%	-0.41%	0.16%	0.64%	0.92%
GBP (swap)	0.73%	0.98%	1.47%	1.89%	2.09%	2.04%
CZK (govt)	0.18%	0.31%	0.54%	0.90%	1.57%	2.09%
HUF (govt)	1.03%	1.75%	2.58%	3.32%	4.09%	4.21%

**Volatility adjustment and Credit Risk adjustment**

The Volatility adjustment (VA) and Credit Risk adjustment (CRA) used at year-end 2016 and 2015 valuation has been taken from the official EIOPA publication for each relevant currency/country.

The following table summarizes the appropriate adjustment adopted at YE16 and YE15 valuation on top of the risk free rate for the main currencies.

**Volatility & Credit Risk adjustment at 31 December 2016 and 2015**

	2016		2015	
	VA	CRA	VA	CRA
EUR	13 bps	-10 bps	22 bps	-10 bps
CHF	5 bps	-10 bps	9 bps	-10 bps
GBP	30 bps	-17 bps	31 bps	-12 bps
CZK	1 bps	-10 bps	6 bps	-10 bps

**Implied volatilities**

To model equity and property, a range of equity indices are considered, and a log excess return above short rate model is used to generate returns from fixed income dynamics of the economy. A time-varying volatility model is adopted for modelling the equity index. Equity volatilities are taken from implied volatilities of at the money forward equity index quoted options. Concerning property, a constant volatility model is used, with volatilities taken mainly from historic returns also reflecting other available data sources.

Fixed income volatilities are taken from implied volatilities of at the money swaptions. Swaption implied volatility and equity option implied volatility used for year-end 2016 EV valuation have been based on the market data as at 31 December 2016. All available market data has been used, without any smoothing or anchoring techniques.

Since 2016 has been characterized by very low or even negative interest rate, and the lognormal (LN) volatilities surface was not always quoted on the markets, Generali decided to move from lognormal (LN) to normal volatilities (NV).

It has to be noted that the new approach considers volatility in absolute terms instead of relative terms. Therefore, even if the normal market implied volatility remains more or less stable (as for example Euro area), the relative volatility increases dramatically in the current lower interest rates environment.

The following tables compare 2015 and 2016 volatilities based on Normal volatilities:

#### Valuation at 31 December 2016

	Swaption implied volatilities					Equity option implied volatilities				
	1 year	2 year	5 year	10 year	20 year	1 year	2 year	5 year	7 year	10 year
EUR	0.65%	0.68%	0.74%	0.73%	0.65%	19.4%	20.3%	21.3%	21.7%	22.0%
CHF	0.53%	0.63%	0.77%	0.78%	0.69%	16.0%	16.1%	16.1%	16.5%	16.8%
CZK	0.53%	0.58%	0.61%	0.71%	0.50%	17.0%	17.4%	17.7%	18.5%	19.1%

#### Valuation at 31 December 2015

	Swaption implied volatilities					Equity option implied volatilities				
	1 year	2 year	5 year	10 year	20 year	1 year	2 year	5 year	7 year	10 year
EUR	0.63%	0.68%	0.75%	0.74%	0.65%	20.8%	20.6%	21.5%	21.5%	21.5%
CHF	0.55%	0.64%	0.76%	0.77%	0.68%	16.8%	16.5%	16.2%	16.3%	16.4%
CZK	0.60%	0.66%	0.69%	0.81%	0.57%	17.4%	17.8%	18.1%	18.7%	19.2%

The swaption volatilities illustrated above refer to volatilities implied in options on 10-year swap at the money. The equity indices used in the calibration are the Euro Stoxx 50 for the EUR economy, SMI for the CHF economy and PX for the CZK economy.

#### Correlations

Correlations between asset returns, being not directly observable metrics, are inferred using an analysis of historical data, expert opinions and expectations implied by market prices. For each considered economy, the excess return correlation target between 10-year bond and equity is 16% (15% in 2015).

### 6.1.2 Other Economic Assumptions

#### Future taxation

The assumptions for future taxation are based on the prevailing local tax rates as at the respective valuation dates. Where applicable, account has been taken of the specific tax treatment of income on certain asset classes backing both technical reserves and required capital, including tax credits or exemptions on dividend income, tax credits on investment returns and tax exemptions on certain qualifying participations. In Italy, allowance has also been made for loss of interest that is associated to the taxes payable in advance on reserves according to DL. 168/2004 and subsequent amendments and the "Legge di stabilità 2016" that allowed for reduction of IRES from 27.5% to 24% starting from 1<sup>th</sup> of January 2017. In France, following the approval by the local government before the end of year, we allowed for the progressive reduction of taxes from the actual ordinary tax rates 34.43% to 28.92% in 2020.

The following table shows the ordinary average taxation rates at 31 December 2016 and 2015.

#### Taxation as at 31 December 2016 and 2015

	2016	2015
Italy	30.8%	32.7%
France	34.4%	34.4%
Germany	32.0%	32.0%
Central Eastern Europe	19.1%	19.1%
EMEA	21.5%	22.4%
Lat.Am.&Asia	23.9%	23.1%

Exchange rates

All the EV-related values have been calculated using local currencies, converted to EUR using year-end exchange rates. Within the full year NBV, each quarterly NBV has been converted to EUR using the exchange rates valid at the end of the quarter.

The following table shows the assumed year-end exchange rates (foreign currency against 1 EUR) for selected currencies.

***Exchange rates as at 31 December 2016 and 2015***

	2016	2015
GBP United Kingdom Pound	0.85	0.74
CHF Switzerland Franc	1.07	1.09
CZK Czech Republic Koruny	27.02	27.02
HUF Hungary Forint	308.86	316.01
PLN Poland Zloty	4.40	4.29
CNY China Yuan Renminbi	7.33	7.05

Inflation rates

Inflation rates have been derived from the market implied inflation rate in the scenarios' calibration process described above. To inflate expenses, specific allowance has also been made for the additional inflation related to salaries and medical costs.

**6.2 OPERATING ASSUMPTIONS**

Operating assumptions such as expenses and commissions, mortality, morbidity, lapses and annuity take-up rates, have been determined by each company on the base of their best estimates as of the valuation date, referring to the current experience when available or to appropriate industry benchmarks.

Regarding the expenses, full allowance has been made for all expenses within the life and health business in the Group, with the exclusion of 68mln of non-recurrent expenses (after tax) treated as extraordinary expenses. The value of new business at point of sale is shown after the deduction of all acquisition costs. Maintenance expenses, generally expressed as per-policy amounts, are assumed to increase at the inflation rate, with specific allowance for the inflation of salaries and medical costs.

Commissions and other payments to distribution channels have been projected based on the agreements in-force at the valuation date.

Life insurance and asset management contract charges, terms and conditions, including surrender value bases, management fees and other charges, have been assumed to remain unaltered at the levels prevailing at the valuation date, as have all infra-group arrangements.

Management actions included in the actuarial platforms (mainly consisting in decisions regarding asset investment and disinvestment, payments to and withdrawals from profit sharing funds, and the determination of crediting rates – see also Annex A2) are in line with the regulatory requirements and with actual strategies as executed in recent years and as expected in agreed business plans.

## Annex A: METHODOLOGY

Generali has adopted a “bottom-up” market consistent stochastic approach, which is compliant with the Market Consistent Embedded Value (MCEV) Principles published by the European Insurance CFO Forum in April 2016.

In line with the MCEV Principles, the Embedded Value is defined as the sum of the Adjusted Net Asset Value and the Value In-Force.

### A1. ADJUSTED NET ASSET VALUE

With reference to the consolidation perimeter of the covered business, the Adjusted Net Asset Value (ANAV) corresponds to the consolidated market value of the assets backing the shareholders' funds, net of taxes and policyholder interests on unrealised capital gains and losses, and net of other adjustments required to maintain consistency with the methodology underlying Value In Force. In particular, ANAV is derived from corresponding IFRS shareholder's equity, adjusted to reflect the after tax impact of the following main items:

- elimination of the value included in the IFRS Equity for Goodwill, DAC, Value of Business Acquired and other intangibles;
- adjustment to fair value for assets not backing technical provisions that are not considered on a fair value basis under IFRS (in particular property and loans);
- elimination of any unrealised gain/loss included in the IFRS shareholder's equity which is already captured in the VIF;
- other adjustments to reflect the economic valuation of items already captured in IFRS NAV but not considered at their fair value.

### Required capital

Required capital represents the market value of assets that are required to support the covered business in addition to those required to back technical reserves and other policyholder liabilities, taking into account both local regulatory solvency requirements and internal objectives.

Starting from year-end 2015 Generali defines the level of required capital for each EEA business unit as the local Regulatory Solvency II risk adjusted capital. It is presented net of the impact of relevant eligible items that can be used to support capital requirements with no associated cost to shareholders. For non EEA it is defined as the maximum between the 100% of the local regulatory required capital and the Solvency II capital based on Standard formula, net of the relevant free coverage.

In case of local restrictions on distribution of free assets, no free coverage has been applied.

### A2. VALUE IN-FORCE

The Value In-Force is defined as the present value of the projected stream of after tax industrial profits that are expected to be generated by the covered business in force at the valuation date, assuming assets at local statutory book values (segregated fund values for Italian revaluable business) equal to the technical reserves, net of the cost of financial guarantees and options granted to policyholders, the frictional costs of holding required capital and the cost of non hedgeable risks. Calculations are performed at local company level, based on local statutory reserving regulations.

Taxes are applied taking into account prevailing fiscal regimes. In case of projected tax credits, Generali allows for the consideration of existing consolidation effects at Country level and for the use of possible management actions which can be carried out at Group level to ensure their full recoverability.

For participating business, the profit sharing and the allocation of profits between shareholders and policyholders has been based on local company practice, taking account of regulatory constraints.

Starting from year-end 2016 Solvency II Contract Boundaries have been applied.

VIF can be broken down into the components illustrated below.

### Present Value of Future Profits before Time Value of Financial Guarantees and Options

It is equal to the present value of future after tax industrial profits calculated according to a certainty-equivalent approach, i.e. projecting cash flows in a scenario in which the market return of all assets is set equal to the reference rate and discounting at the same reference rate.

It represents the value of the business without taking credit at valuation date for any future asset risk premium over the reference rate and it captures the intrinsic value of financial guarantees and options.

### Time Value of Financial Guarantees and Options (Time Value of FG&O)

It represents the additional cost to shareholders associated with financial guarantees and options, including dynamic policyholder behaviour, over and above the intrinsic value that is already reflected in the PVFP defined above; it is calculated on a market consistent basis.

For the vast majority of business with financial guarantees and options, stochastic models are used to project future industrial profits over a range of risk-neutral economic scenarios, appropriately allowing for the impact of financial guarantees and options. The mean of the PVFPs arising in the different economic scenarios represents the value of the business allowing for the market consistent value of the financial guarantees and options, determined in line with the way cash flows with similar optionality would be valued in the financial markets. The Time Value of Financial Guarantees and Options is then calculated as the difference between the PVFP before the Time Value of FG&O defined above and the mean of the stochastic PVFPs.

Stochastic models are set up appropriately allowing for the business-specific structure of financial guarantees and of profit sharing, and also allowing for management actions and for the corresponding behaviour of policyholders. Management actions mainly consist of decisions regarding asset investment and disinvestment according to scenario specific cash flow positions, payments to and withdrawals from profit sharing funds, and the determination of crediting rates. The target asset allocation is consistent with the asset mix at the valuation date and the principles underlying management actions are in line with the regulatory requirements and with actual strategies as executed in recent years. The stochastic models also allow for policyholder behaviour linked to the development of the capital markets, so that the propensity for lapses increases when market yield is more competitive than the crediting rate offered by the insurer.

The most material financial guarantees and options offered by the covered business are guaranteed interest rates, minimum maturity values, guaranteed minimum surrender values and, where appropriate, inflation guarantees and guaranteed take-up rates on traditional business, and guaranteed maturity values on unit-linked business.

### Frictional costs of required capital

Frictional costs of required capital reflect the economic costs incurred by shareholders through investing in the required capital in an insurance company rather than directly. They are mainly represented by taxation and any policyholders' interests on the investment income of assets backing the required capital plus the investment expenses incurred for the management of these assets (where these have not been already allowed for in the PVFP).

Frictional costs of required capital are independent of the cost of non hedgeable risks.

Frictional costs are calculated by projecting the future levels of required capital over the lifetime of the business, using appropriate risk drivers.

### Cost of non hedgeable risks (Cost of NHR)

The cost of non hedgeable risks is an explicit, additional and separate allowance that covers non hedgeable risks not already allowed for in the PVFP and the Time Value of FG&O. As a general principle, non hedgeable risks refer to both financial and non-financial risks. Since the assumptions for non hedgeable risks used in calculating the PVFP and the Time Value of FG&O are best estimate and company specific, the cost of NHR reflects the fact that:

- experience may vary from projection assumptions and hence a charge for uncertainty in the setting of the best estimate assumptions could be needed;
- the single best estimate assumptions may not fully capture the asymmetry in shareholder's results;
- allowance should be made for any risks that are not included in the PVFP and the Time Value of FG&O (e.g. operational risks).

The cost of non hedgeable risks is calculated using a “cost of capital” approach, based on Solvency II Capital for non hedgeable risks projected across all projection years with appropriate drivers. The annual charge applied is equal to 4%, before the application of taxes at the local ordinary taxation level.

### A3. NEW BUSINESS VALUE

New business refers only to new contracts written in the year and excludes other automatic premium increases relating to prior years' business.

NBV is determined as the present value, at the point of sale (i.e. taking account of the first year new business strain) of the projected stream of after tax industrial profits that are expected to be generated by the covered new business written in the year, net of the cost of financial guarantees and options granted to policyholders, the frictional costs of setting up and holding required capital and the cost of non hedgeable risks.

The full-year NBV is defined as the algebraic sum of the NBV of each quarter, calculated with beginning of period operating and economic assumptions. Each quarterly NBV is consolidated after consideration of end of quarter minorities, and converted to Euro using end of quarter exchange rates.

## Annex B: “REAL-WORLD” PROJECTIONS

“Real-world” best estimate financial assumptions are used by companies performing market consistent valuations, to derive:

- the best estimate expected results and the unwinding rate within the analysis of movement;
- the internal rate of return and payback period of the new business.

The structure of the economic assumptions used in “real-world” projections is unchanged in respect of prior years and is based on country-specific benchmark rates set equal to the 10-year par yield of local government bonds. The returns of the other asset classes are then set by adding pre-determined risk premia to the country-specific benchmark rates. The assumptions used are summarised in the following tables with reference to 31 December 2015 and 2016.

### ***Best-estimate economic assumptions as at 31 December 2016***

	Italy	France	Germany	CEE	EMEA	Lat.Am.&Asia
10 y Government Bond	1.78%	0.68%	0.24%	1.43%	0.58%	4.09%
Equity Total Return	3.14%	3.14%	3.14%	3.36%	3.01%	6.59%
Property Total Return	1.39%	1.39%	1.39%	1.64%	1.18%	4.84%

### ***Best-estimate economic assumptions as at 31 December 2015***

	Italy	France	Germany	CEE	EMEA	Lat.Am.&Asia
10 y Government Bond	1.61%	1.00%	0.66%	1.66%	1.06%	3.90%
Equity Total Return	3.56%	3.56%	3.56%	3.47%	3.32%	6.25%
Property Total Return	1.81%	1.81%	1.81%	1.71%	1.40%	4.50%

## Annex C: Definitions

**Embedded Value** (EV) is an actuarially determined estimate of the value of a company, excluding any value attributable to future new business. With reference to the covered business, and to the relevant consolidation perimeter (i.e. the operating life and health companies of the Group), the EV is equal to the sum of the Adjusted Net Asset Value and the Value In-Force.

**Adjusted Net Asset Value** (ANAV) corresponds to the consolidated market value of the assets backing the shareholders' funds, net of taxes and policyholder interests on any unrealised capital gains and losses, after the elimination of goodwill and DAC, net of other adjustments required to maintain consistency with the valuation of the in-force business, and before the payment of dividends from profits of the year.

**Value In-Force** (VIF) is the present value of the projected stream of after tax industrial profits that are expected to be generated by the covered business in force at the valuation date, after allowance for:

- the cost of financial guarantees and options granted to policyholders;
- the frictional costs of holding the required capital;
- the cost of non hedgeable risks.

**Embedded Value Earnings** correspond to the difference between the closing and the opening EV, excluding adjustments to opening EV and capital movements.

**Operating Embedded Value Earnings** correspond to Embedded Value Earnings, net of economic variances and other non operating variances.

**Normalised Operating Embedded Value Earnings** correspond to Operating Embedded Value Earnings, net of other operating variances.

**Required Capital** is the market value of assets that are needed to support the covered business in addition to those required to back technical reserves and other policyholder liabilities, taking into account local regulatory solvency requirements and internal objectives.

**New Business Value** (NBV) is the present value, at the point of sale, of the projected stream of after tax industrial profits expected to be generated by the new business written in the year, after allowance for:

- the cost of financial guarantees and options granted to policyholders;
- the frictional costs of setting up and holding the required capital;
- the cost of non hedgeable risks.

Full year NBV is calculated as the algebraic sum of the NBV of each quarter, each of them calculated with beginning of period operating and economic assumptions.

**Annual Premium Equivalent** (APE) is defined as new business annualised regular premiums plus 10% of single premiums.

**Present Value of New Business Premiums** (PVNBP) is defined as the present value of the expected future new business premiums, allowing for lapses and other exits, discounted to point of sale using the reference rates.

**Internal Rate of Return** (IRR) is defined as the rate that makes equal to zero the present value of new business distributable profits (therefore allowing for new business first year industrial strain and required capital absorption) calculated using "real-world" best estimate assumptions (see Annex B).

**Payback Period** is the period of time (in years, from issue date) required to recover the cost of the initial investment in new business (i.e. new business first year industrial strain and required capital absorption) calculated by means of a deterministic projection of distributable profits based on "real-world" best estimate assumptions (see Annex B).

**Implied Discount Rate** (IDR) is the discount rate that, when applied to a deterministic projection of future distributable profits based on "real-world" best estimate assumptions, produces the same value as that arising from the market consistent valuation.

## Independent Auditor's Assurance Report on Generali Group Market Consistent Embedded Value

To the Board of Directors of  
Assicurazioni Generali S.p.A.

We have performed the procedures detailed below on the accompanying "Generali 2016 Life Embedded Value - Supplementary Information" ("Life EV Report") of Assicurazioni Generali S.p.A. ("Generali" or "Company") as of 31 December 2016 and for the year then ended, which comprises the value of business in force, the new business value, the analysis of movements on embedded value, the sensitivities and the related notes. The Life EV is an alternative method of reporting the value and performance of the life, health and insurance business, and should not be considered as a substitute for Generali's financial statements. Significant actuarial assumptions and estimates are used to determine Life EV and, accordingly, actual outcomes may differ significantly from those expected.

### Management's responsibilities for the Life EV report

Management is responsible for the preparation and fair presentation of the Life EV Report in accordance with the Market Consistent Embedded Value ("MCEV") Principles and Guidance published by the European Insurance CFO Forum in May 2016, using the market consistent methodology and the assumptions set out on pages 26 to 32 ("MCEV Principles and Guidance"), and for such internal control as management determines is necessary to enable the preparation of the Life EV Report that are free from material misstatement, whether due to fraud or error.

### Auditor's responsibilities

It is our responsibility to issue this report, based on the work performed, as to whether the Life EV Report of the Company has been properly prepared in accordance with the MCEV Principles and Guidance.

We conducted our work on the methodology and assumptions used for the preparation of the Life EV Report in accordance with the *International Standard on Assurance Engagements - ISAE 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information"* issued by the *International Auditing and Assurance Standards Board (IAASB)*. The standard requires us to plan and execute our work to obtain a limited assurance. The nature, timing and extent of procedures for gathering sufficient appropriate evidence in a limited assurance engagement are, however, less in scope than an audit or a reasonable assurance engagement performed in accordance with ISAE 3000 (Revised) and, accordingly, we do not express an audit opinion and not all relevant matters might have come to our attention that would have been reported to you. The applicable professional standard requires us to comply with the independence and ethical requirements of Italian applicable laws and regulations and to maintain quality controls environment as required by ISQC1, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Inherent Limitations

The Life EV Report is based upon assumptions as to future best estimate operating experience, and economic assumptions set in a market consistent framework. Actual experience is likely to be different from that assumed to determine Life EV, and deviations from expected experience may be material.

## Summary of the Work Performed

In performing our work we relied on data and information provided by the Company.

Our work primarily consisted of the following procedures:

- understanding of the procedures adopted by management to prepare the Life EV Report;
- analysis of the market consistent approach adopted by management, described in the EV Report, for consistency with the Market Consistent Embedded Value Principles and Guidance defined by the European Insurance CFO Forum;
- analysis for the consistency of the methodology used and implemented by management with that described in the EV Report;
- analysis for the internal consistency of the economic assumptions and of their consistency with observable market data;
- analysis for the consistency of the operational assumptions with regard to past, current and expected future experience;
- performing checks on results, as to consistency with methodology and assumptions;
- obtaining the information and explanations as deemed necessary to deliver our conclusion.

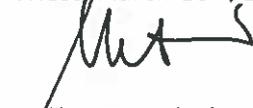
## Conclusions

Based on our work nothing came to our attention that caused us to believe that the Life EV Report of the Company in respect of the year ended 31 December 2016 has not been properly prepared, in all material aspects, in accordance with the methodology and assumptions set out on pages 26 to 32 of the MCEV Principles and Guidance. Furthermore nothing came to our attention that caused us to believe that we did not receive all the information and explanations we required for our review. In addition, we conclude that:

- The methodology and assumptions comply with the MCEV Principles and Guidance;
- The operating assumptions are reasonable in the context of recent available experience and management expectations about the future operating environment.

Our work has been undertaken so that we might state to the directors of the Company those matters we are required to state to them in a report and for no other purpose. Our report is made solely to the directors of the Company, as a body. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the directors of the Company as a body, for our work, for this report, or for the conclusions we have formed.

Triest March 15<sup>th</sup>, 2017



Matteo Brusatori  
(Partner)

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**Disclaimer**

To the extent that this paper includes prognoses or expectations or forward-looking statements, these statements may involve known and unknown risk and uncertainties. The actual results and developments may, therefore, differ materially from the stated prognoses or expectations. Besides other reasons not specified here, deviations may be the result of changes in the overall economy or the competitive situation, especially in core activities and core markets. Deviations may also result from lapse ratios, mortality and morbidity rates or tendencies. The development of financial markets and foreign currency exchange rates as well as amendments of national and international law, particularly in respect of tax rules, may have an influence. The company is under no obligation to update the statements made in this paper.

