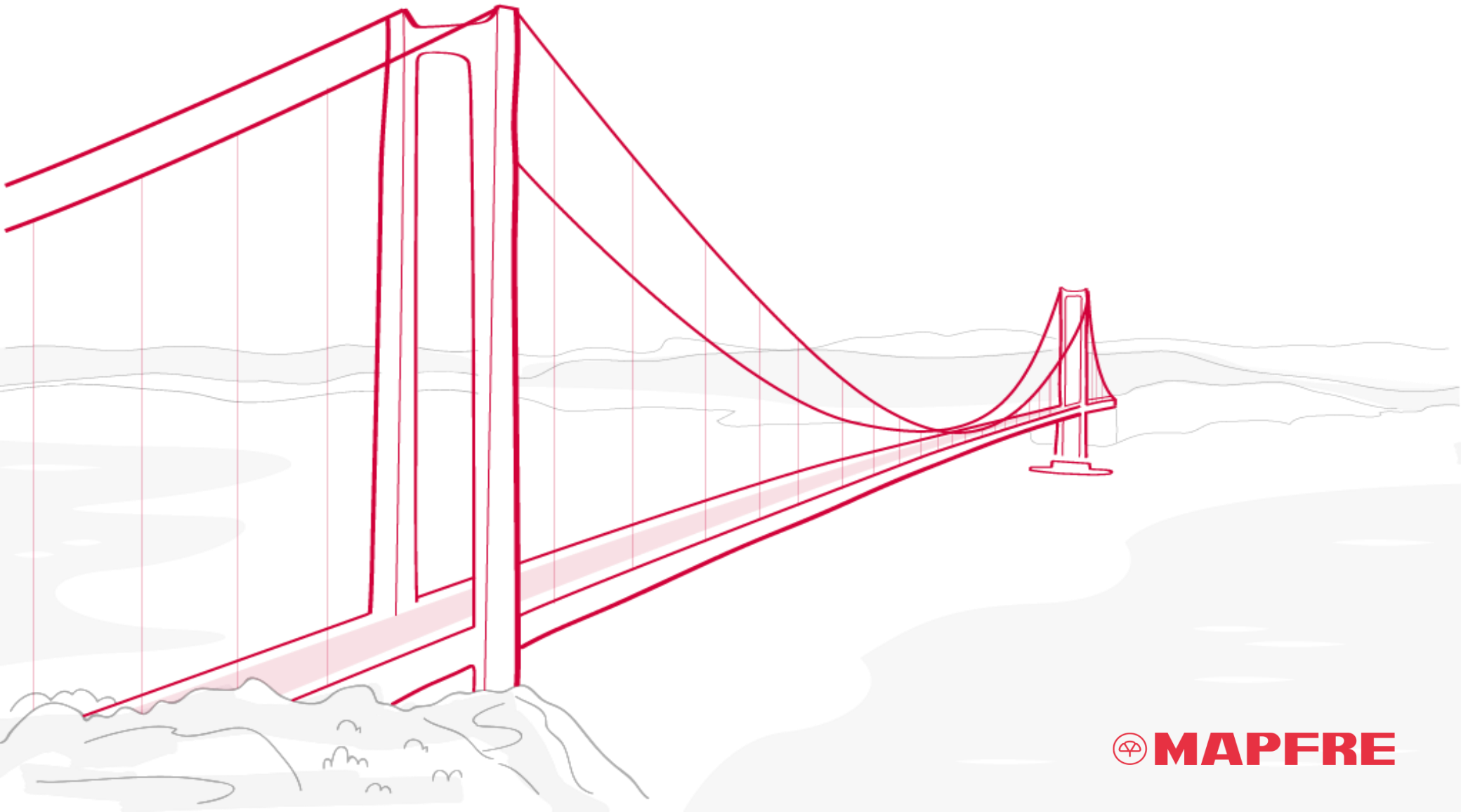


# Market Consistent Embedded Value 2016



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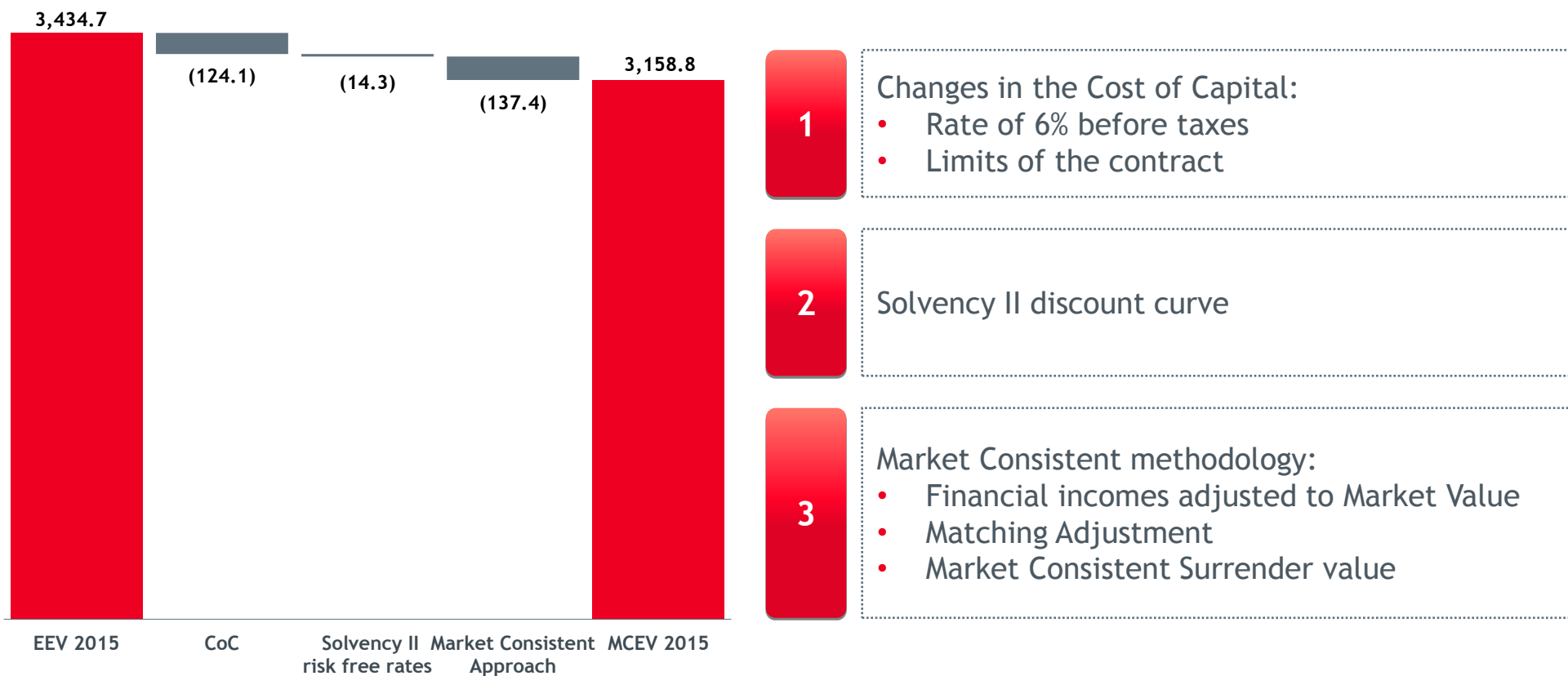
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## Reconciliation between EEV<sup>(1)</sup> y MCEV<sup>(1)</sup>



Million Euros

(1) Without adjustments for minority interests.

## Development of the MCEV in 2016

	2016	△ %
Value of In-force Business (VIF) <sup>(1)</sup>	2,552.1	65.0%
Market Consistent Embedded Value (MCEV) <sup>(1)</sup>	4,548.5	44.0%
Attributable to the Parent Company	3,664.5	53.7%
Attributable to Minority Interests	884.0	14.1%
Return on Embedded Value (RoEV)	10.4%	2.6 p.p.
Present Value of New Business Income (PVNBI) <sup>(1)</sup>	4,927.2	30.7%
Value added by new business <sup>(1)</sup>	155.5	9.3%
New business margin	3.2%	-0.6 p.p.

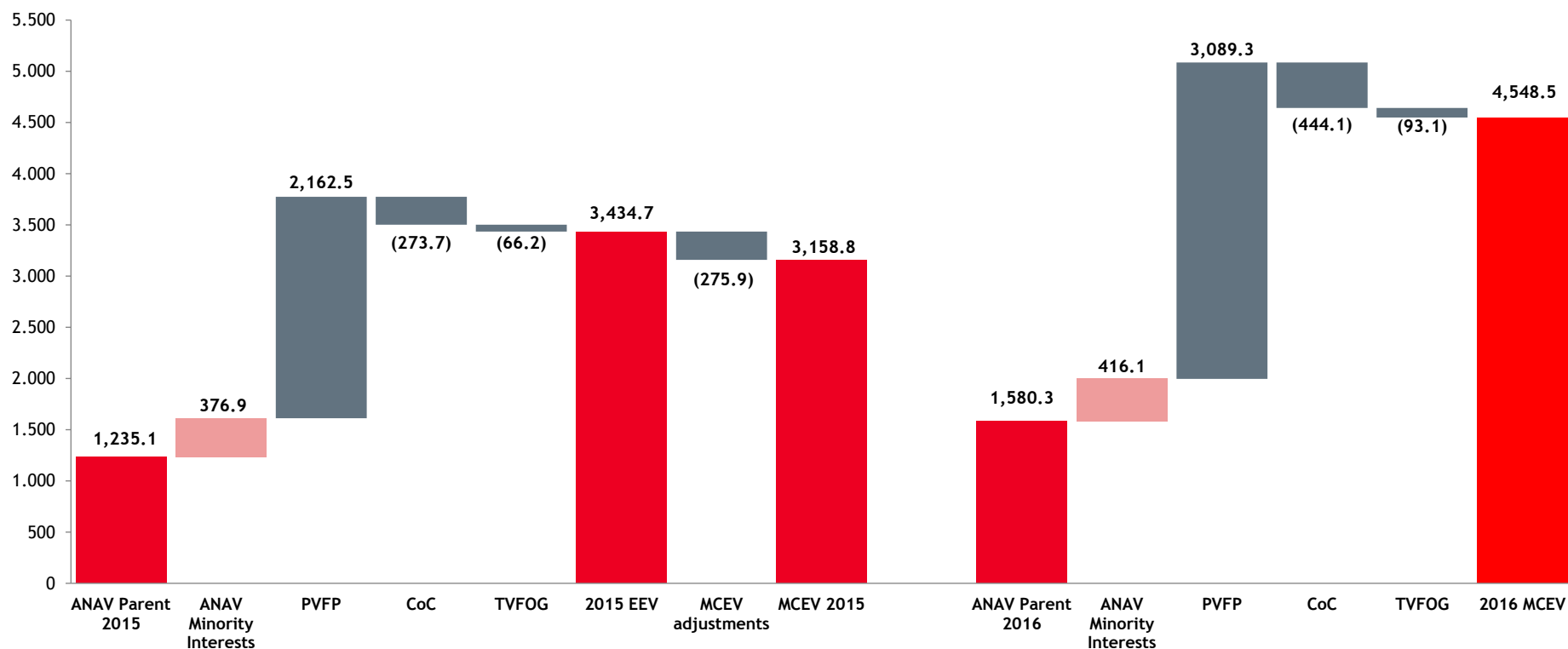
### Key highlights

- Application of the MCEV methodology aligned with Solvency II.
- Elimination of Life business of UNION DUERO VIDA and PENSIONES. Inclusion of Burial business of MAPFRE ESPAÑA, Life business of BANKINTER VIDA in Portugal, and Life business of MIDDLESEA VALLETA in Malta.

## MCEV components and their variation in 2016

### MCEV 2015

### MCEV 2016



## Breakdown of the 2016 MCEV

### By business line

	€ mill.	%	Δ %
Adjusted Net Asset Value	1,996.4	43.9%	23.8%
Net PVFP <sup>(1)</sup> - Life Assurance <sup>(2)</sup>	1,397.6	30.7%	6.6%
- PVFP	1,803.5		6.7%
- CoC	(406.0)		7.1%
Net PVFP <sup>(1)</sup> - Burial Insurance	887.4	19.5%	
- PVFP	916.2		
- CoC	(28.8)		
Net PVFP <sup>(1)</sup> - Mutual Funds	195.3	4.3%	27.3%
- PVFP	197.6		27.3%
- CoC	(2.3)		29.4%
Net PVFP <sup>(1)</sup> - Pension Funds	164.9	3.6%	11.1%
- PVFP	171.9		3.9%
- CoC	(7.1)		-58.4%
TVFOG	(93.1)	-2.0%	40.7%
<b>MCEV 2016</b>	<b>4,548.5</b>	<b>100.0%</b>	<b>44.0%</b>

### By distribution channel

	€ mill.	%	Δ %
Adjusted Net Asset Value	1,996.4	43.9%	23.8%
Net PVFP - Agent channel	1,694.5	37.3%	112.6%
- PVFP	1,930.0		92.4%
- CoC	(235.4)		14.3%
Net PVFP - Bancassurance channel	950.6	20.9%	16.5%
- PVFP	1,159.3		15.0%
- CoC	(208.7)		8.7%
TVFOG	(93.1)	-2.0%	40.7%
<b>MCEV 2016</b>	<b>4,548.5</b>	<b>100.0%</b>	<b>44.0%</b>
Initial capital used to calculate the CoC <sup>(3)</sup>	1,253.6		53.3%

### By undertaking

	Spain - Life	Spain - Burial	Portugal - Life	Malta - Life	Total
Adjusted Net Asset Value	1,698.5	178.3	21.1	98.5	1,996.4
Net PVFP <sup>(1)</sup>	1,689.3	887.4	2.6	65.9	2,645.2
TVFOG	(88.0)	0.0	(1.3)	(3.8)	(93.1)
<b>MCEV 2016</b>	<b>3,299.9</b>	<b>1,065.7</b>	<b>22.4</b>	<b>160.6</b>	<b>4,548.5</b>
% on Total MCEV	72.5%	23.4%	0.5%	3.5%	100.0%

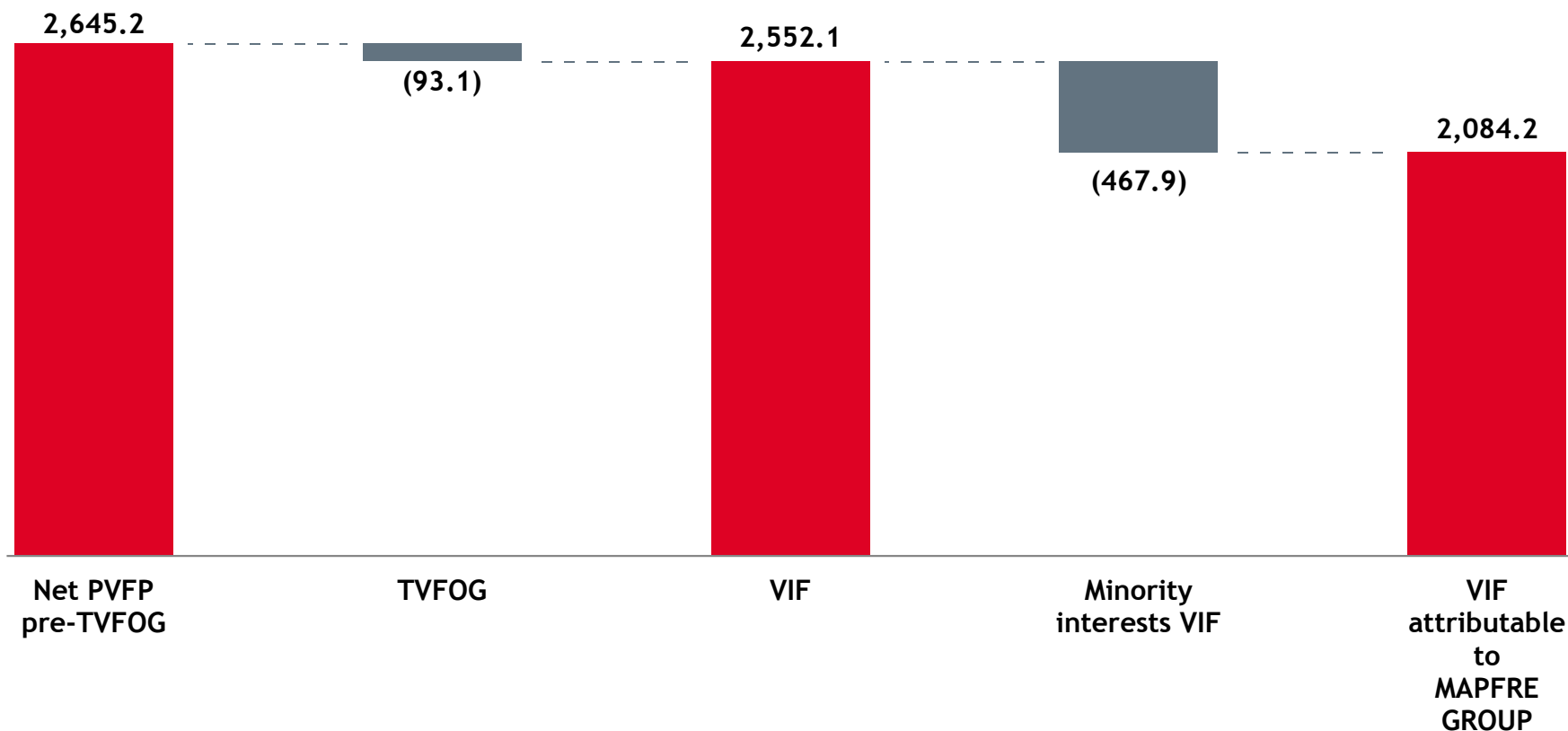
Million Euros

(1) Net PVFP = PVFP - CoC

(2) Includes the in-force values of the Life assurance and Accidental Death insurance businesses.

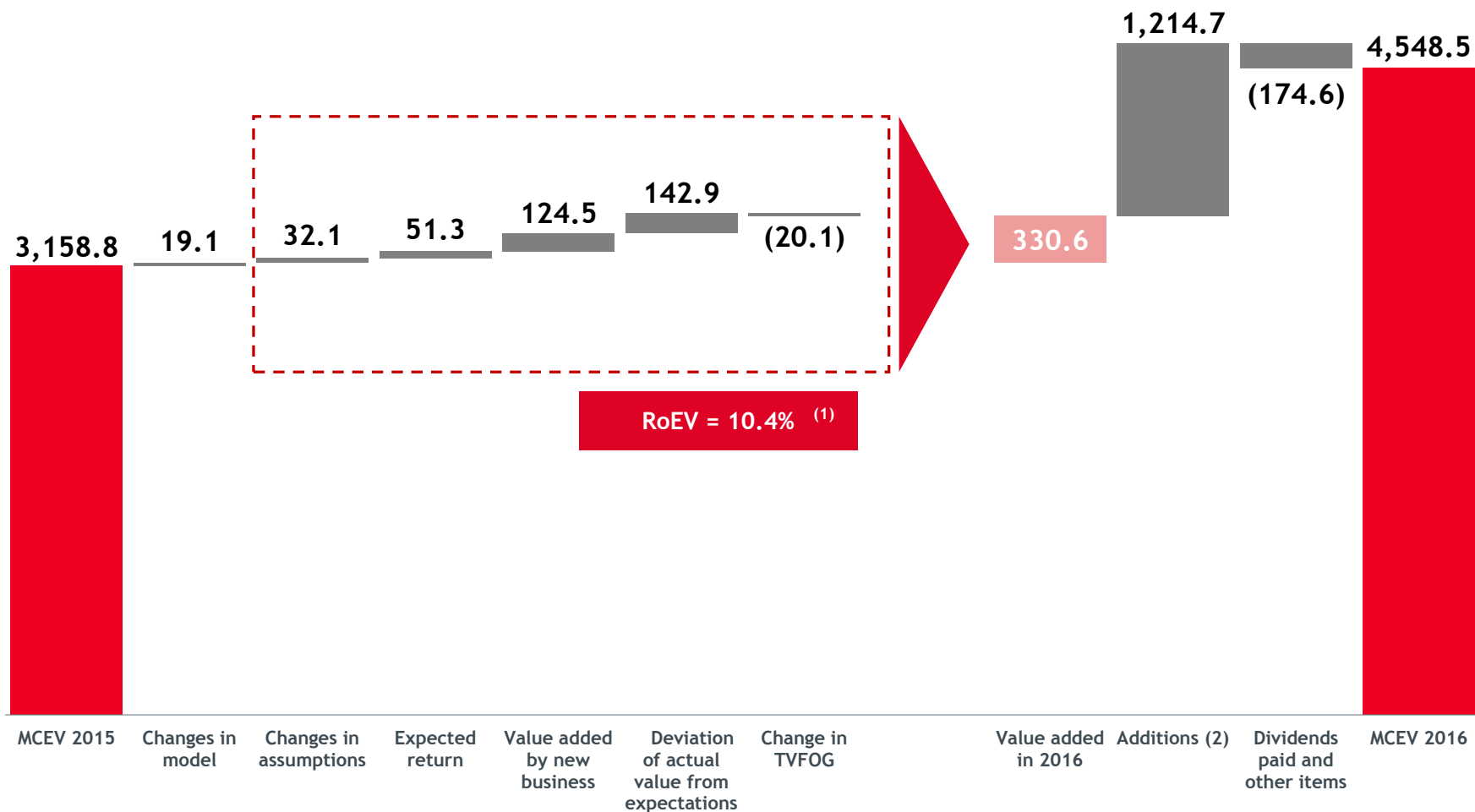
(3) CoC calculations based on an amount of capital equal to 100% of the solvency capital requirement, applying the new rules of Solvency II.

## Share of the parent company in the 2016 VIF



## Value added in 2016

### Change in Embedded Value



Million Euros

(1) Return on Embedded Value = value added in the year / Embedded Value 2015, adjusted for changes in model

(2) Elimination of Life business of UNION DUERO VIDA y PENSIONES. Inclusion of Burial business of MAPFRE ESPAÑA, Life business of BANKINTER VIDA in Portugal, and Life business of MIDDLESEA VALLETA in Malta.



## Analysis of the main variations in MCEV

### Change

#### Changes in model

- Improvements in Cost of Capital valuation models.

#### Changes in assumptions

- Reflects the unfavorable development of the loss experience (-€11.7 million), favorable developments in lapses (+€29.7 million) and expenses (+€56.5 million).
- Shift in the interest rate curve, change in pension plans and investment fund performance, and change in default risk.

#### Expected return

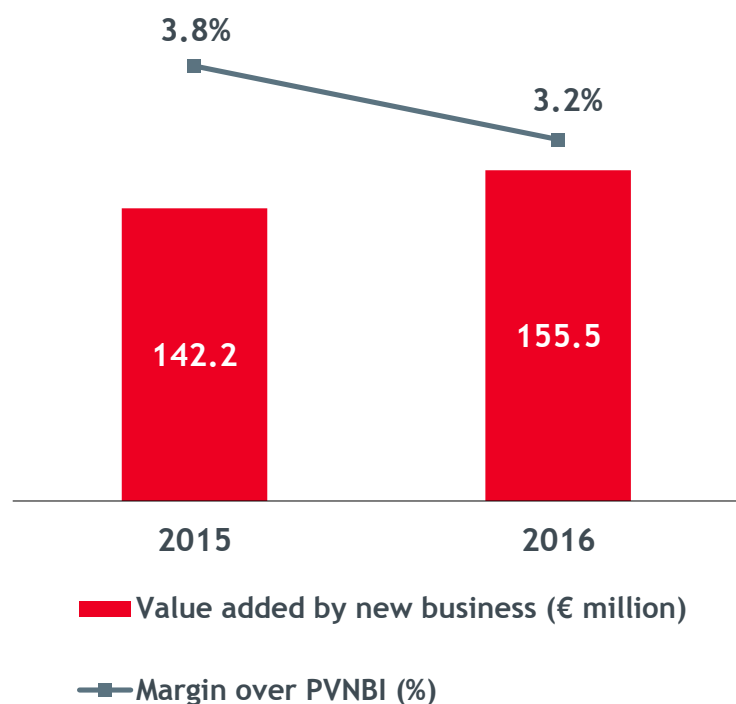
- Includes the impact of the unwinding of the discount rate (+€47.8 million), and the expected after-tax investment return on the adjusted net asset value at the beginning of the year, net of the cost of capital (+€3.5 million).

## Analysis of the main variations in MCEV (contd.)

Change	Description
<b>Deviation of actual value from expectations</b>	<ul style="list-style-type: none"> <li>Reflects primarily the impact on the net asset value of the valuation adjustments of financial investments.</li> </ul>
<b>TVFOG</b>	<ul style="list-style-type: none"> <li>The increase in costs of the TVFOG is due to the downturn in the yield curve in 2016, and to the change to a Market Consistent methodology .</li> </ul>
<b>Inclusions and exclusions</b>	<ul style="list-style-type: none"> <li>Elimination of Life business of UNION DUERO VIDA y PENSIONES<sup>(1)</sup> (-€120.9 million). Inclusion of Burial business of MAPFRE ESPAÑA (+€1,065.7 million), Life business of BANKINTER VIDA in Portugal (+€109.3 million), and Life business of MIDDLESEA VALLETA in Malta (+€160.6 million).</li> </ul>

## Value added by new business (VNB)<sup>(1)</sup>

### Development of the value added



### Key highlights

1

Excludes new production from UNION DUERO VIDA and PENSIONES in 2016, which was included in 2015.

2

Increase in acquisition costs other than commissions in the agent channel.

3

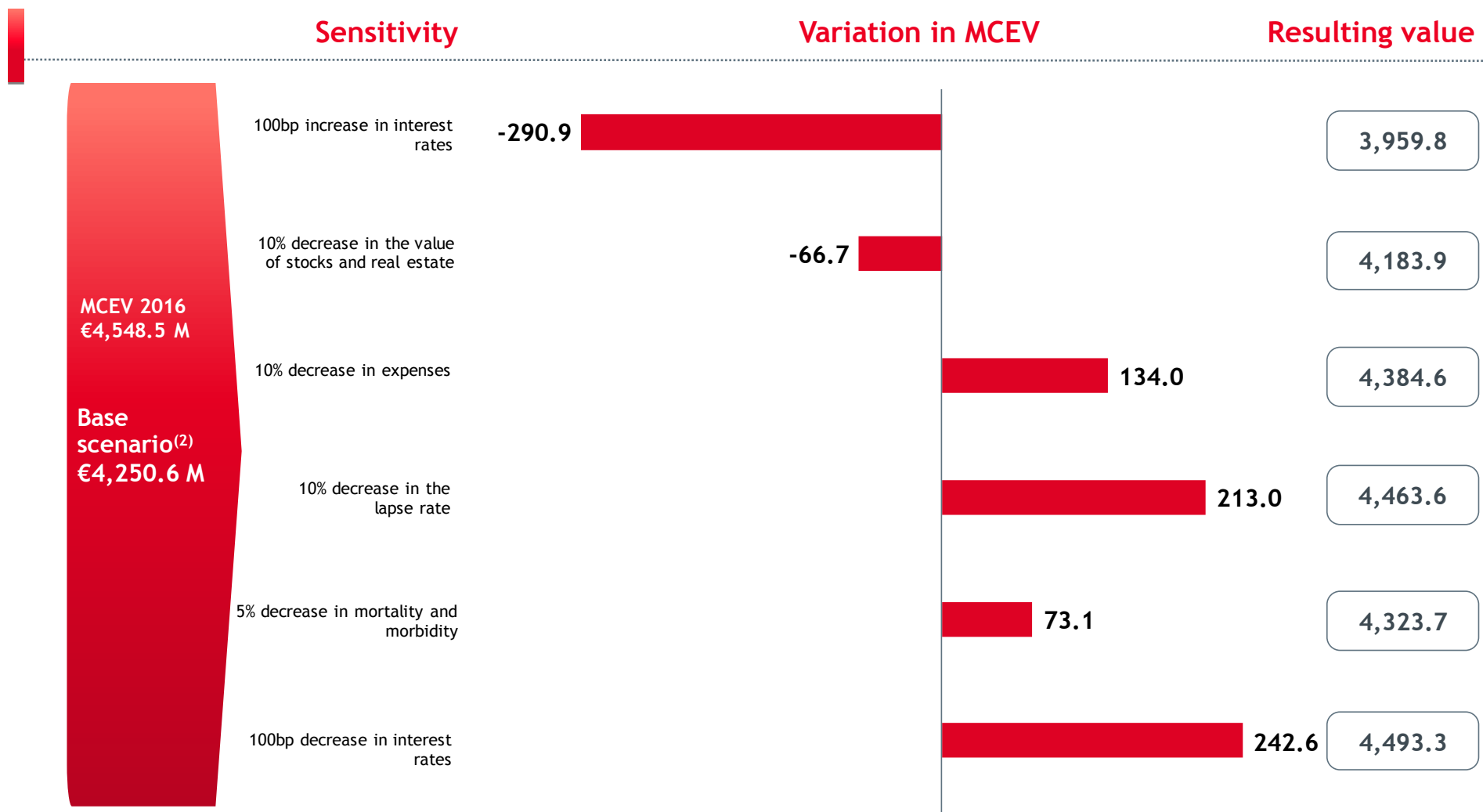
Inclusion of BANKINTER LIFE business in Portugal, the Burial business in MAPFRE ESPAÑA, and the Life MIDDLESEA VALLETA business in Malta.

4

Effect of the change to Market Consistent methodology.

(1) VNB 2015 is calculated under EEV Principles. It has not been reconciled to MCEV Principles.

## Sensitivity analysis of the Market Consistent Embedded Value (MCEV)<sup>(1)</sup>

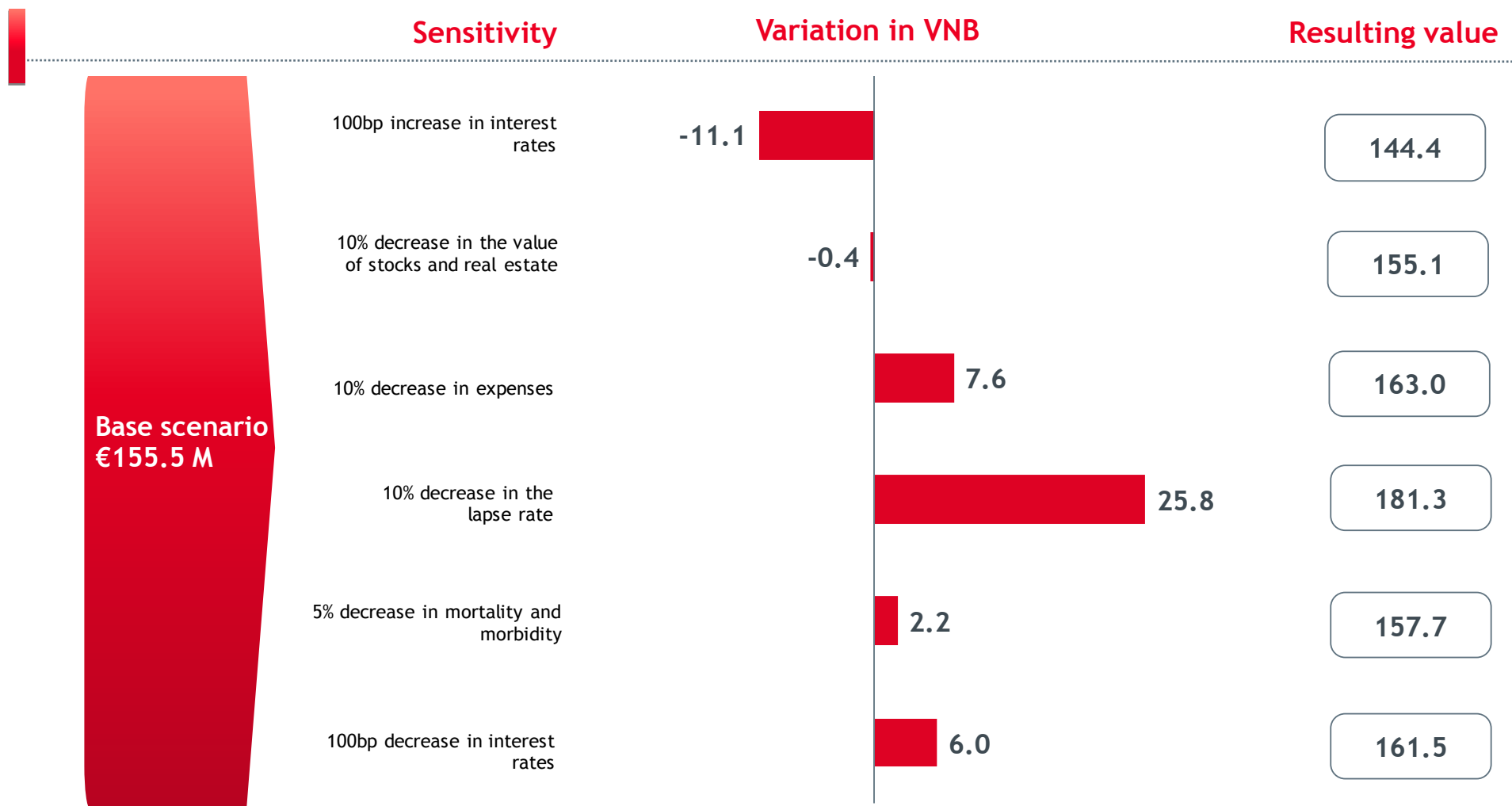


Million Euros

(1) MCEV = ANAV + VIF

(2) The base scenario for the sensitivity analysis has not taken into account the ANAV of MIDDLESEA VALLETA, MAPFRE PORTUGAL and Burial business of MAPFRE ESPAÑA; 93.5% of the MCEV is accounted for in the sensitivities. Next year the ANAV of all the entities that form part of the covered business will be included in this analysis.

## Sensitivity analysis of the value added by new business (VNB)



Million Euros

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26 May 2017

Mapfre S.A.  
 Carretera de Pozuelo 52  
 Edificio 1  
 28222 Majadahonda (Madrid)

Dear Sirs,

**Opinion letter – MCEV results of certain subsidiaries of Mapfre, S.A. as at 31 December 2016**

1. Towers Watson de España, S.A. ("Willis Towers Watson") has been appointed by Mapfre, S.A. to provide an actuarial opinion on the calculation of the embedded value ("EV") results of certain subsidiaries of Mapfre, S.A. as at 31 December 2016 for external use.
2. The EV results have been prepared by Mapfre, S.A. to comply with the Market Consistent Embedded Value Principles and Guidance issued by the CFO Forum dated April 2016 (the "MCEV Principles").
3. The EV results of Mapfre, S.A. cover the business of the following companies:
  - Mapfre Vida, S.A. de Seguros y Reaseguros sobre la Vida Humana ("Mapfre Vida") and its subsidiaries:
    - a. Bankia Mapfre Vida, S.A. de Seguros y Reaseguros;
    - b. Mapfre Inversión S.V., S.A., consisting of Mapfre Inversión Dos, S.G.I.I.C., S.A. and Mapfre Vida Pensiones, E.G.F.P., S.A.;
    - c. Bankinter Seguros de Vida, SA de Seguros y Reaseguros;
    - d. CCM Vida y Pensiones S.A. de Seguros y Reaseguros
  - Mapfre Seguros de Vida, S.A. in Portugal;
  - Middlesea Valletta Life Assurance Co Ltd., business of Mapfre in Malta; and
  - Funeral business of the property and casualty company of Mapfre in Spain, Mapfre España, S.A.

This is referred to as the covered business. The non-covered business which is not included in the EV results consists of the remaining businesses of Mapfre i.e. general insurance business and the life insurance business sold in Latin America.

**Scope**

4. The EV results have been prepared by Mapfre, S.A. and its subsidiaries and Willis Towers Watson has carried out a review of the methodology and assumptions used by Mapfre, S.A. to calculate the EV results against the requirements of the MCEV Principles. A summary of the key aspects of methodology and assumptions used by Mapfre, S.A. can be found in Appendix 3 of Mapfre MCEV 2016 presentation.
5. Willis Towers Watson has also reviewed the 2016 EV and new business value results, the sensitivities and the EV earnings in 2016 prepared by Mapfre, S.A., as shown on pages 4, 5, 6, 7, 8, 11, 12 and 13 of Mapfre MCEV 2016 presentation.

**Conclusions**

6. Willis Towers Watson has concluded that the methodology and assumptions used, together with the disclosure provided in this document, comply with the MCEV Principles and Guidance.
7. This compliance has been achieved by aligning the MCEV basis to Mapfre, S.A. Solvency II methodology and assumptions, as permitted by the revised MCEV Principles and Guidance dated April 2016, except for the contract boundaries of the annual renewable products, where under MCEV methodology future renewals were projected, considering the probability of cancellation, until the expiration of the contracts.
8. Consistently with the above, the cost of capital was calculated on a theoretical required capital, which would correspond to applying that same limit of contract to the calculation of the risks.
9. Further, based on a high-level review of the results of the calculations, but without undertaking detailed checks on the models and processes involved, Willis Towers Watson considers that any issues discovered do not have a material impact on the 2016 embedded value, analysis of embedded value earnings, value of new business and sensitivity tests.
10. Our work and this letter are subject to the reliance and limitations contained in paragraphs 11 to 17 of this letter. The work is based on information received up to and including 12 May 2017.

**Reliance and limitations**

11. The review was conducted on behalf of Mapfre, S.A. and designed according to the terms and requirements of the Directors of Mapfre, S.A.. Our opinion is made solely to Mapfre, S.A. in accordance with the terms of Willis Towers Watson's engagement letter. To the fullest extent permitted by applicable law, Willis Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than Mapfre, S.A. for or in connection with its review work, the opinions it has formed, or for any statement set forth in this letter.
12. Willis Towers Watson has prepared this Opinion letter for its intended use by persons technically competent in financial and insurance matters and solely for the use of Mapfre, S.A. It should not be relied upon by any other party. No reference to Willis Towers Watson in any reports, accounts or other published documents is permitted without our prior written consent.
13. In carrying out our review we have relied without independent verification upon the accuracy and completeness of the data and information provided to us, both in written and oral form, by Mapfre, S.A. and its subsidiaries and we have been informed that the Directors of Mapfre, S.A. know of no other information or data which ought to have been made available to Willis Towers Watson that would materially affect the opinion set out herein.
14. We have not reviewed the compliance of Mapfre's Solvency II methodology and assumptions against Solvency II regulations and requirements.

15. Reliance has been placed upon, but not limited to, information regarding historic annual reports and accounts, life insurance and mutual and pension fund product characteristics and charges, asset allocations by product line, asset values, expense analyses, sales force commission scales, internal claim and discontinuance studies, levels of in-force premiums, number of policies, technical reserves, mutual and pension funds by product, terms of reinsurance agreements, electronic policy data bases, cash flow projections by product, analyses of movement and analyses of sensitivities.
16. We have not attempted to assess the suitability, quality or value of the assets of Mapfre, S.A. and its subsidiaries, or to provide any warranty as to the adequacy of the technical reserves. We have also not investigated any claims against Mapfre, S.A. and its subsidiaries, other than those made by policyholders or fund participants under the normal terms of insurance, mutual fund or pension fund business. In particular, no account has been taken of liabilities in respect of pension entitlements, service contracts, leases and breaches of legislation, regulatory rules or guidance.
17. Assumptions are made about future experience, including economic and investment experience, tax, expenses, lapse rates, mortality and reinsurance. These assumptions have been made on the basis of reasonable estimates. However, actual future experience is likely to differ from these assumptions, due to random fluctuations, changes in the operating environment and other factors. Such variations in experience could have a significant effect on the results and conclusions of this letter. No warranty is given by Willis Towers Watson that the assumptions made in this letter will be reflected in actual experience.

Yours sincerely,



Felipe Gómez



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## Covered business

- The 2016 Embedded Value of the Life and Burial business generated by the companies with the highest business volume (measured in provisions) of the MAPFRE Group has been determined, consisting of the following business blocks:
  - Life assurance (including complementary) and Accidental Death insurance businesses sold through the agent channel in the IBERIA region (MAPFRE VIDA in Spain and MAPFRE SEGUROS DE VIDA in Portugal).
  - Life assurance business (including complementary) and Accidental Death insurance businesses in BANKIA MAPFRE VIDA (formerly MAPFRE-CAJA MADRID VIDA, ASEVAL and LAIETANA VIDA).
  - Life assurance (including complementary), Accidental Death insurance businesses and Pension Funds businesses of CCM VIDA Y PENSIONES and BANKINTER SEGUROS DE VIDA (including business in Spain and Portugal).
  - Mutual fund and pension fund businesses of MAPFRE INVERSIÓN S.V., S.A., MAPFRE INVERSIÓN DOS, S.G.I.I.C., S.A. and MAPFRE VIDA PENSIONES, E.G.F.P., S.A. de Seguros, S.A. ("MAPFRE INVERSIÓN Y PENSIONES").
  - Burial business of MAPFRE ESPAÑA.
  - Life business of MIDDLESEA VALLETA in Malta.

## Non-covered business

- The MAPFRE GROUP operates Life Assurance business in other countries not included in the MCEV calculation.

## Methodology

- The embedded value of the Life assurance, Accidental Death insurance, Mutual funds and Pension funds businesses includes the adjusted net asset value and the value of in-force business, defined as follows:
  - Embedded value = Adjusted Net Asset Value + Value of In-Force Business
  - Adjusted Net Asset Value (ANAV) = Shareholders' equity at market value, adjusted to obtain the economic value of capital
  - Value of the In-Force Business (VIF) = PVFP - TVFOG - CoC
- In contrast to previous years, the Market Consistent Embedded Value (MCEV) methodology has been used. The main difference with respect to the EEV used above is that the yields of the assets and the credit risk are determined in such a way that the net flows of the assets, discounted to the origin, coincide with their market value. In this way, yields and credit risk cease to be a hypothesis and become a consequence of the market price of the assets.
- According to the latest version of the MCEV principles, a methodology aligned with Solvency II criteria has been chosen, except for:
  - Contract limits: in annual renewable products in which solvency II criterion establishes that the contract limit for valuation purposes is at the end of the current annuity, the criterion applied in the MCEV has been to project the successive renewals, considering the probability of cancellation, until the expiration of the contracts.
  - Consistent with the above, the cost of capital has been calculated on a theoretical required capital, which would correspond to applying that same limit of contract to the calculation of the risks.

**In particular, Solvency II criteria have been followed in:**

  - Discount Curves: Risk-free reference rates published by EIOPA at the valuation date have been used, including volatility adjustments or matching adjustments (by product).
  - Risk Margin methodology has been followed for the cost of capital, including the factor of 6% per annum (before taxes).

## Methodology (contd.)

- **Adjusted Net Asset Value (ANAV):**

- Adjusted Net Asset Value or "ANAV" is equal to equity in accordance with IFRS adjusted by: committed donations and dividends; goodwill; deferred expenses; and any other element necessary to obtain the economic value of capital.

- **Present Value of Future Profits (PVFP):**

- The Present Value of Future Profits or "PVFP" is equal to the present value of expected future accounting profits of the portfolio in force at the valuation date, after tax and discounted to the reference curve. The financial performance of the business in force has been calculated on the basis of interest rates on the reference curve, except for fixed interest rate assets related to Life-Savings insurance, where book yields have been used with an adjustment for credit risk based on the market value of the assets. The PVFP includes the "intrinsic value" of the FOG granted to the insured.
- The financial performance of future investments has been calculated based on interest rates of the reference curve.

## Methodology (contd.)

### ▪ Time Value of Financial Options and Guarantees (TVFOG):

- Under MCEVP, FOG (Financial Options and Guarantees) are defined as those features of the covered business conferring potentially valuable underlying guarantees, or options to change, the level or nature of policyholders' benefits and exercisable at the discretion of policyholders, whose potential value is impacted by the performance of financial variables.
- The cost of FOG is valued through the measurement of two different elements:
  - intrinsic value: the cost of FOG under existing conditions at the valuation date
  - time value: the change in the cost of FOG resulting from potential changes in policyholders' benefits that may occur throughout the life of the policy
- The intrinsic value of FOG is already recognised implicitly in the calculation of the PVFP. It is therefore necessary to include the additional cost arising from the time value of FOG (TVFOG).
- TVFOG was calculated for the main FOG in the covered Life business. Specifically, the calculation focused on the TVFOG corresponding to the guaranteed interest rate in with-profits products, as well as in other products with variable interest rates and minimum guaranteed returns.
- The calculation of TVFOG assumed the realisation of gains/losses on equity and property investments to:
  - minimise the impact of profit sharing on the Company's results; and
  - keep the asset mix close to its breakdown as at 31.12.2016.
- TVFOG is based on stochastic simulations of market-consistent financial assumptions (between 1,000 and 2,000, depending on the entity) and is equal to the difference between the value of in-force business calculated under a deterministic approach and the average value of the in-force business calculated stochastically.

## Methodology (contd.)

### ▪ Cost of Capital (CoC):

- In line with the Risk Margin Solvency II calculation, the CoC used in the 2016 MCEV has been measured by applying a fixed rate of 6% (gross of taxes) to the required solvency capital, excluding market risks. The same criterion of contract limits has been considered as in the calculation of the PVFP.
- It is an adjustment for frictional costs and non-hedgeable risks, not considered in the Present Value of Future Profits.
- To calculate the CoC, the required capital has been projected into the future based on the most appropriate drivers for each line of business.

### ▪ With-profits business:

- MAPFRE's with-profits in-force business in Spain comprises products with the following features that are common in the Spanish insurance market:
  - A minimum return guarantee, ranging between 0.5% and 6.0% in MAPFRE's case.
  - A profit-sharing mechanism defined as: X% of (Financial return - minimum guaranteed return - expense loadings) over the average mathematical reserve, which cannot be negative under any circumstance. X% varies by product, although it is equal to 90% in most cases. Financial returns and their volatility depend on the book returns of the assets backing the product, and is subject to some degree of discretion by management including, for instance, decisions on the realisation of gains/losses and on the asset mix.
- The combination of a minimum return guarantee and a profit-sharing mechanism that cannot yield negative results generates asymmetric flows for shareholders and, as a consequence, a positive time value of FOG.
- The profit-sharing business in Malta consists of products with flexible future discretionary participation with characteristics similar to those in the English market.

## Methodology (contd.)

### ▪ *Look through MCEVP:*

- In order to correctly assign revenues and expenses to the businesses that generate them and measure the value of each block of business more consistently with its economic reality, the following adjustments were made:
  - The Mutual Funds business, as well as a part of Pension Funds and Accidental Death businesses, are sold through the distribution network of MAPFRE VIDA. The MCEV and VNB of the aforementioned Mutual Funds, Pension Funds and Accidental Death businesses have been adjusted in order to include the net present value of the future profits/losses expected to arise in the distribution company from this business.
  - The assets of the Life assurance business are managed by MAPFRE INVERSIÓN Y PENSIONES. The MCEV and VNB of the aforementioned Life assurance business have been adjusted in order to include the net present value of the future profits/losses expected to arise in the asset management company from this business.

### ▪ **Sensitivity:**

- In interest rates downward sensitivity, where the shift of 100 basis points drops rates below 0%, they are floored at zero according to the MCEV Guidance. Where the base rates are already negative they are not further reduced.

## Methodology (contd.)

### ▪ Value added by New Business (VNB):

- In Life assurance and Burial insurance, new business is defined as single, extraordinary and regular premiums written in the year, as well as extraordinary contributions to existing policies not already considered in the valuation of the in-force business. In the Mutual Funds business, new business is defined as new contributions. In the Pension Funds business, new business is defined as single, extraordinary and regular contributions from new participants, as well as extraordinary contributions from existing participants.
- The value added by new business is the intrinsic value added by new business in the period, net of acquisition expenses, TVFOG and CoC, valued at year-end using the assumptions applicable at that point in time.

### ▪ Statement of Directors:

- The Board of Directors of MAPFRE, S.A. confirms that the results shown in this document have been prepared in all material respects in accordance with the Market Consistent Embedded Value Principles issued by the European Insurance CFO Forum in April 2016.  
This document presents the results, methodology and underlying assumptions used to calculate the 2016 MCEV for all the covered business.  
Willis Towers Watson has been engaged to review the calculation of the embedded value results. The scope and conclusions of this review are stated in the Willis Towers Watson opinion letter.



# Assumptions

## EEV 2015

<b>Discount rate</b>	Euroswap zero-coupon curve as 31/12/2015
	1 año -0.06%
	5 años 0.33%
	10 años 1.02%
	15 años 1.45%
	20 años 1.63%
<b>Financial returns</b>	
- Existing assets	Euroswap curve rates except for existing fixed interest assets backing Life -savings business, where book returns adjusted for credit risk based on historical transition matrices and default rates have been used.
- Reinvestment yield	Based on the euroswap zero-coupon as at 31/12/2015
<b>Maintenance expenses</b>	<ul style="list-style-type: none"> <li>- Based on internal analyses</li> <li>- Expressed in Euros per policy</li> <li>- Indexed to a 2.5% inflation</li> <li>- There are no exceptional expenses to be excluded</li> </ul>
<b>Fees and comissions</b>	In line with the existing fee structure
<b>Mortality, disability, surrenders and turnovers</b>	Tables based on the company's own experience
<b>Cost of Capital</b>	
- Capital requirement	100% of the Solvency II economic capital
- Annual cost	4% p.a.
<b>Tax rate</b>	25%
<b>Stochastic asset model (TVFOG)</b>	Market-consistent using swaption implied volatilities as 31/12/2015

## MCEV 2016

<b>Risk free rates as 31/12/2016 (EIOPA curve without VA)</b>	
	1 año -0.30%
	5 años -0.02%
	10 años 0.57%
	15 años 0.96%
	20 años 1.12%
<b>Interest rates on the EIOPA curve<sup>(1)</sup>, except for the existing fixed-income assets backing Life-Savings business, for which yields have been used in Books with a credit risk adjustment based on the market value of assets</b>	
<b>Based on the risk-free curve Risk at 12/31/2016</b>	
<ul style="list-style-type: none"> <li>- Based on internal studies</li> <li>- Expressed in euros per policy</li> <li>- Between 1% and 2.5% according to entity</li> <li>- There are no exceptional expenses to be excluded</li> </ul>	
<b>In line with the existing fee structure Tables based on the company's own experience</b>	
<b>100% SCR Solvency II (without contract limits) 6% per annum before taxes</b>	
<b>25% Spain and Portugal, 35% Malta</b>	
<b>Consistent with the market using implied volatilities in options on swaps as 31/12/2016</b>	

(1) With Volatility or Matching Adjustment for certain businesses, as applied under Solvency II.

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## Breakdown of the value added by new business (VNB)

### Breakdown by business line

	PVNBI <sup>(1)</sup>		VNB <sup>(2)</sup>		VNB/PVNBI	
	2015	2016	2015	2016	2015	2016
<b>Life Assurance</b>	<b>1,642.6</b>	<b>2,540.7</b>	<b>124.1</b>	<b>85.5</b>	<b>7.6%</b>	<b>3.4%</b>
- Agent channel	1,142.2	1,564.6	33.9	0.6	3.0%	0.0%
- Bancassurance channel	500.5	976.1	90.2	84.9	18.0%	8.7%
<b>Burial Insurance</b>		<b>109.6</b>		<b>28.2</b>		<b>25.7%</b>
<b>Mutual Funds</b>	<b>1,437.6</b>	<b>1,683.0</b>	<b>13.1</b>	<b>38.6</b>	<b>0.9%</b>	<b>2.3%</b>
<b>Pension Funds</b>	<b>689.3</b>	<b>593.9</b>	<b>5.1</b>	<b>3.3</b>	<b>0.7%</b>	<b>0.6%</b>
- Agent channel	454.0	346.4	2.3	0.3	0.5%	0.1%
- Bancassurance channel	235.4	247.5	2.8	3.0	1.2%	1.2%
<b>TOTAL</b>	<b>3,769.5</b>	<b>4,927.2</b>	<b>142.3</b>	<b>155.5</b>	<b>3.8%</b>	<b>3.2%</b>

### Breakdown by distribution channel

	PVNBI <sup>(1)</sup>		VNB <sup>(2)</sup>		VNB/PVNBI	
	2015	2016	2015	2016	2015	2016
<b>Agent channel</b>	<b>3,033.7</b>	<b>3,703.6</b>	<b>49.3</b>	<b>67.6</b>	<b>1.6%</b>	<b>1.8%</b>
<b>Bancassurance channel</b>	<b>735.8</b>	<b>1,223.7</b>	<b>93.0</b>	<b>87.9</b>	<b>12.6%</b>	<b>7.2%</b>
<b>TOTAL</b>	<b>3,769.5</b>	<b>4,927.2</b>	<b>142.3</b>	<b>155.5</b>	<b>3.8%</b>	<b>3.2%</b>

Million Euros

(1) Present Value of New Business Incomes

(2) Value added by new business. VNB 2015 is calculated under EEV Principles. It has not been reconciled to MCEV Principles.

## Breakdown of 2016 change in MCEV between ANAV and VIF<sup>(1)</sup>

	ANAV	VIF <sup>(1)</sup>	TOTAL
Value in 2015 - Attributable to MAPFRE Group	1,235.1	1,149.0	2,384.1
Minority interests	376.9	397.8	774.7
<b>EEV 2015</b>	<b>1,612.0</b>	<b>1,546.8</b>	<b>3,158.8</b>
Changes in assumptions	0.0	32.1	32.1
Expected return	215.2	-163.9	51.3
Value added by new business	-67.9	192.4	124.5
Deviation of actual value from expectations	134.9	8.0	142.9
Change in TVFOG <sup>(2)</sup>	0.0	-20.1	-20.1
<b>Value added in 2016</b>	<b>282.2</b>	<b>48.4</b>	<b>330.6</b>
Changes in the model	0.0	19.1	19.1
Additions	276.8	937.9	1,214.7
Dividends paid and other items	-174.6	0.0	-174.6
<b>Value in 2016</b>	<b>1,996.4</b>	<b>2,552.1</b>	<b>4,548.5</b>
Minority interests	416.1	467.9	884.0
<b>Value in 2016 - Attributable to MAPFRE Group</b>	<b>1,580.3</b>	<b>2,084.2</b>	<b>3,664.5</b>
<b>RoEV<sup>(3)</sup></b>	<b>17.5%</b>	<b>3.1%</b>	<b>10.4%</b>

Million Euros

(1) VIF = PVFP - TVFOG - CoC

(2) Not considering TVFOG from new business, which are considered in the line "Value added by new business"

(3) Return on Embedded Value» = Value added in the year / Previous Embedded Value, adjusted for changes in the model

## Breakdown of the sensitivity analysis

### Sensitivity of the Market Consistent Embedded Value<sup>(1)</sup>

Impact of:	LIFE SPAIN		BURIAL SPAIN	PORTUGAL LIFE	MALTA MSV
	Agent channel	Bancassurance channel			
- 100bp increase in interest rates	-47.9	-111.5	-131.9	1.8	-1.4
- 10% decrease in the value of stocks and real estate	-54.0	-10.5	0.0	-0.7	-1.5
- 10% decrease in expenses	30.9	24.1	76.9	0.8	1.3
- 10% decrease in the lapse rate	90.6	69.4	50.6	0.7	1.7
- 5% decrease in mortality and morbidity	-10.3	15.7	66.0	0.2	1.5
- 100bp decrease in interest rates	30.8	64.5	147.7	-2.0	1.6

### Sensitivity of the value added by new business

Impact of:	LIFE SPAIN		BURIAL SPAIN	PORTUGAL LIFE	MALTA MSV
	Agent channel	Bancassurance channel			
- 100bp increase in interest rates	0.7	-8.1	-3.6	0.1	-0.2
- 10% decrease in the value of stocks and real estate	0.0	0.0	0.0	0.0	-0.4
- 10% decrease in expenses	4.8	1.9	0.7	0.0	0.1
- 10% decrease in the lapse rate	13.0	10.2	2.3	0.1	0.3
- 5% decrease in mortality and morbidity	-0.6	1.8	0.9	0.0	0.2
- 100bp decrease in interest rates	-1.8	4.5	3.3	-0.1	0.2

Million Euros

(1) The base scenario for the sensitivity analysis has not taken into account the ANAV of MIDDLESEA VALLETA, MAPFRE PORTUGAL and Burial business of MAPFRE ESPAÑA; 93.5% of the MCEV is accounted for in the sensitivities. Next year the ANAV of all the entities that form part of the covered business will be included in this analysis.

## Reconciliation of the Adjusted Net Asset Value (ANAV)

<b>Consolidated shareholders' equity for MAPFRE Group<sup>(1)</sup> as at 31/12/2016 (IFRS)</b>	<b>1,973.8</b>
Unrealised gains (losses)	-65.4
- of which: property	52.7
- of which: financial assets	-118.0
Donations and dividends	-3.2
Intangible assets	-369.3
Commissions and other acquisition costs net of taxes	-52.7
Other	96.9
<b>Consolidated adjusted shareholders' equity for MAPFRE Group as at 31/12/16</b>	<b>1,580.3</b>
Minority interests	416.1
<b>Consolidated adjusted net asset value for MAPFRE Group as at 31/12/16<sup>(2)</sup></b>	<b>1,996.4</b>

Million Euros

1) It refers to the Own Funds of the covered business included in the MCEV, not to the total of Own Funds of the MAPFRE Group.

2) Amount used in Market Consistent Embedded Value calculations. It only includes ANAV of covered business.

## Share of the parent company in the MCEV

	MAPFRE Group	Minority interests
<b>ANAV</b>		
ANAV	1,580.3	416.1
<b>NET PVFP<sup>(1)</sup></b>		
AGENT CHANNEL	1,694.5	0.0
BANCASSURANCE CHANNEL	462.5	488.2
<b>TOTAL</b>	<b>2,157.0</b>	<b>488.2</b>
<b>TVFOG</b>		
AGENT CHANNEL	-53.9	0.0
BANCASSURANCE CHANNEL	-18.8	-20.3
<b>TOTAL</b>	<b>-72.8</b>	<b>-20.3</b>
<b>MCEV 2016</b>	<b>3,664.5</b>	<b>884.0</b>

Million Euros

1) NET PVFP = PVFP - CoC

## Share of the parent company in the Value added by New Business (VNB)

	MAPFRE Group	Minority interests
Value added by New Business		
AGENT CHANNEL	67.5	--
BANCASSURANCE CHANNEL	42.8	45.2
<b>2016 Value added by New Business</b>	<b>110.3</b>	<b>45.2</b>



# Content

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**1** EEV analysis

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**2** Willis Towers Watson opinion letter

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**3** Methodological appendix

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**4** Statistical appendix

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**5** Glossary

- The **Market Consistent Embedded Value Principles** or “**MCEVP**” are the principles that establish the methodology that must be applied in order to calculate the Market Consistent Embedded Value. The MCEVP were agreed upon by the CFOs of the multinational European insurers belonging to the “CFO Forum” in order to increase the comparability and transparency of the embedded value calculations carried out by insurance companies. The document that contains the MCEVP can be obtained at the following Internet address: [www.cfoforum.nl](http://www.cfoforum.nl).
- The **Adjusted Net Asset Value** or “**ANAV**” is equal to the shareholders’ equity as defined under IFRS adjusted for: unrealised gains or losses belonging to shareholders; committed donations and dividends; goodwill; deferred expenses; and any other item needed to calculate the economic capital.
- **Financial Options and Guarantees** or “**FOG**” are those features of the covered business conferring potentially valuable guarantees underlying, or options to change, the level or nature of policyholders’ benefits and exercisable at the discretion of policyholders, whose potential value is impacted by the performance of financial variables.
- The **Value of an Option** is composed of two elements: the **Intrinsic Value** and the **Time Value**. In the case of a call option, the intrinsic value is equal to the difference between the price of the underlying asset and the strike price of the option (in the case of a put option the order of the difference is inverted). The intrinsic value cannot be less than zero. The time value is equal to the difference between the total value and the intrinsic value and it is ascribed to the potential for benefits under the option to increase in value prior to expiry.
- The **Present Value of Future Profits** or “**PVFP**” is determined as the present value of future statutory profits which are expected to be generated from the existing business in force at the valuation date, after tax and discounted using the risk free curve. Investment returns for existing business have been calculated on the basis of the risk free curve, except for existing fixed interest assets backing Life-Savings business, where book returns adjusted for credit risk and defaults rates have been used. PVFP includes the intrinsic value of financial options and guarantees granted to the insured.

- The **Cost of Capital** or “**CoC**” represents an allowance for frictional costs, non-hedgeable risks as well as unexpected credit risk which has not been considered in the value of in-force business. The CoC used in the calculation of the MCEV was measured on the basis of an amount of capital equal to 100% of the minimum regulatory requirement.
- The **Value of In-force Business** or “**VIF**” is equal to:  $PVFP - TVFOG - CoC$
- The **Market Consistent Embedded Value** or “**MCEV**” is the embedded value calculated in accordance with “Market Consistent Embedded Value Principles”. MCEV is equal to:  $ANAV + VIF$
- **Changes in Assumptions** are changes in the future experience assumed in the calculation of the present value of in-force business, including economic, expense, lapse and mortality assumptions.
- The **Expected Return on the Beginning of the Year Embedded Value** is equal to the actual after-tax investment return on the beginning-of-the-year adjusted net asset value less the cost of capital, plus the return, at the discount rate, on the beginning-of-the-year value of the in-force business and capital.
- The **Deviation of Actual Value from Expectations** arises mainly from the variance between the actual experience and the assumed experience used to calculate the beginning-of-the-year embedded value.
- The **Return on Embedded Value** or “**RoEV**” is obtained by dividing the value added in the year by the embedded value at the close of the previous year, adjusted for changes in the model.

- **New Business** is defined as: in the case of Life assurance, single, extraordinary and regular premiums from policies written in the year, as well as extraordinary contributions to existing policies not already considered in the valuation of the in-force business; in the case of mutual funds, new contributions; in the case of pension funds, single, extraordinary and regular contributions from new participants, as well as extraordinary contributions from existing participants.
- The **Present Value of New Business Income** or “**PVNBI**” corresponds to: in the case of Life assurance, the present value of received and expected premiums from new business; in the case of mutual funds, contributions received in the year; and in the case of pension funds, contributions received in the year and expected from new business.
- The **Value added by New Business** or “**VNB**” is the intrinsic value added by new business in the period, net of acquisition expenses, TVFOG and CoC, valued at year-end using the assumptions applicable at that point in time.

## Disclaimer

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