# **European Embedded Value 2012**





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## Development of the EEV in 2012

		2012	△ %
Value of In-force Business (VIF)		1,734.8	-2.6%
European Embedded Value (EEV) <sup>(1)</sup>		2,604.9	-1.3%
	Attributable to the Parent Company	1,796.6	-1.6%
	Attributable to Minority Interests	808.3	-0.4%
Return on Embedded Value (RoEV)		4.9%	-2.9 p.p.
Present Value of New Business Income (PVNBI)		3,430.7	-11.5%
Value added by new business <sup>(2)</sup>		183.0	-22.9%
New business margin		5.3%	-0.8 p.p.

#### Key highlights

- Inclusion of minority interests in the Adjusted Net Asset Value released
- Lower net issuance as a result of the financial crisis
- Greater relative weight of Life-Savings insurance
- Strength of the agents' channel

#### Million Euros

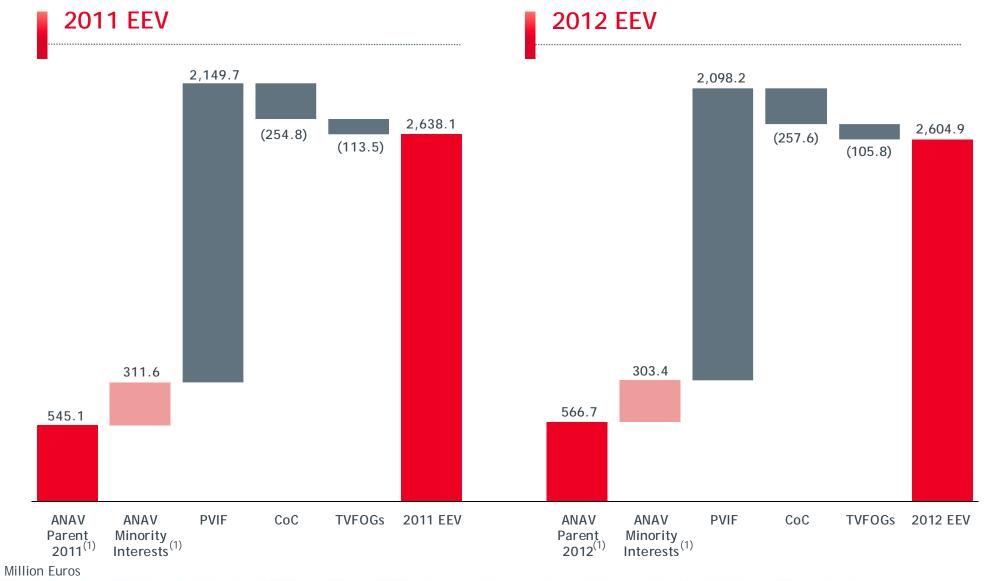
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<sup>1)</sup> The minority interests have been included in the adjusted net asset value. For consistency purposes, the figures corresponding to the EEV 2011 have been restated as well.

2) No adjustments made for the share of minority interests



## EEV components and their variation in 2012



<sup>1)</sup> The minority interests have been included in the adjusted net asset value. For consistency purposes, the figures corresponding to the EEV 2011 have been restated as well.



#### Breakdown of the 2012 EEV

#### By business line

	€ mill.	%	△ %
Adjusted Net Asset Value	870.1	33.4%	1.6%
Net PVIF <sup>(1)</sup> - Life Assurance <sup>(2)</sup>	1,519.4	58.3%	-3.4%
- PVIF	1,761.4		-2.6%
- CoC	(242.0)		3.0%
Net PVIF <sup>(1)</sup> - Mutual Funds	78.3	3.0%	-0.1%
- PVIF	79.4		-0.1%
- CoC	(1.1)		0.0%
Net PVIF <sup>(1)</sup> - Pension Funds	242.9	9.4%	17.8%
- PVIF	257.4		-1.9%
- CoC	(14.5)		-22.7%
TVFOGs	(105.8)	-4.1%	-6.8%
EEV 2012	2,604.9	100.0%	-1.3%
Initial capital used to calculate the CoC <sup>(3)</sup>	798.9		-0.3%

## By distribution channel

	€ mill.	%	△ %
Adjusted Net Asset Value	870.1	33.4%	1.6%
Net PVIF - Agents' channel	814.5	31.3%	-6.3%
- PVIF	944.4		-5.2%
- CoC	(129.9)		2.0%
Net PVIF - Bank channels	1,026.1	39.4%	0.0%
- PVIF	1,153.8		0.0%
- CoC	(127.7)		0.2%
TVFOGs	(105.8)	-4.1%	-6.8%
EEV 2012	2,604.9	100.0%	-1.3%
Initial capital used to calculate the CoC <sup>(3)</sup>	798.9		-0.3%

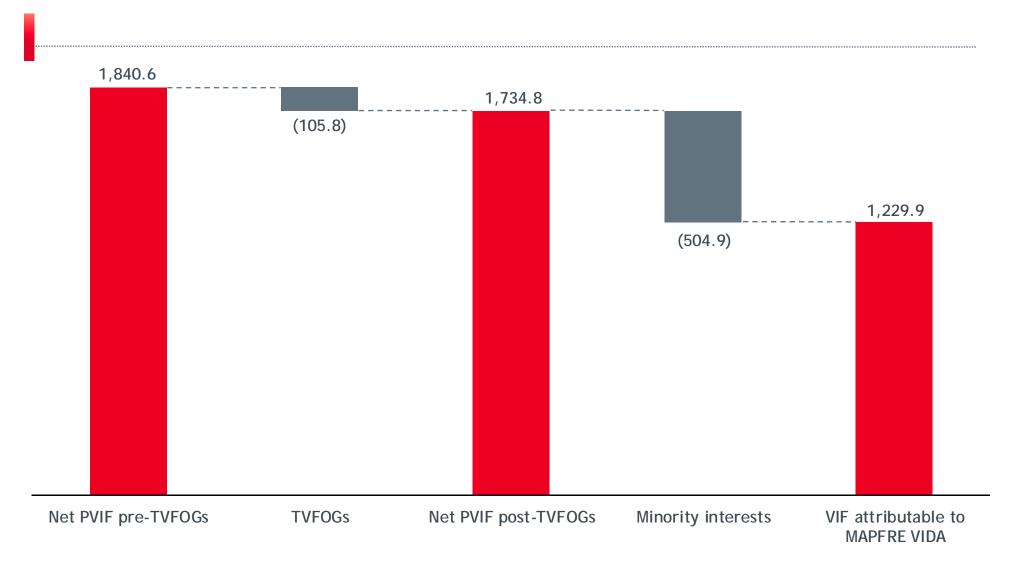
<sup>1)</sup>PVIF = "Present Value of In-Force business"

<sup>2)</sup> Includes the in-force values of the Life assurance and accidental death insurance businesses

<sup>3)</sup> EEV calculations based on an amount of capital equal to 100% of the minimum required solvency margin as at 31/12/2012



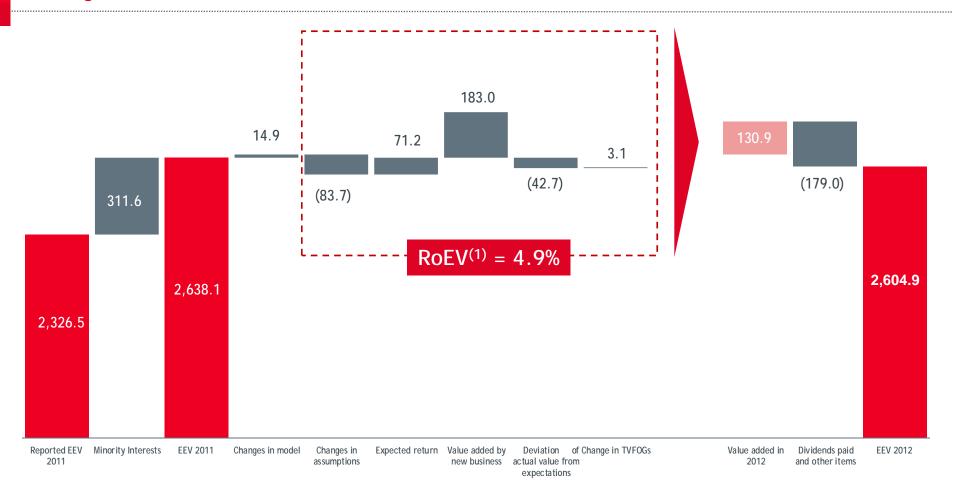
## Share of the parent company in the 2012 VIF





#### Value added in 2012

#### Change in Embedded Value





#### Analysis of the main variations in EEV

#### Change

#### **Description**

# Minority interests

 The minority interests have been included in the adjusted net asset value. For consistency purposes, the figures corresponding to the EEV 2011 have been restated as well.

# Changes in model

Reflects primarily the improvements introduced in the databases used

# Changes in assumptions

• The negative impact of the changes in assumptions reflects mainly an increase in lapse rates (-€133 million) as well as a scenario with a higher credit risk (-€95 million), offset by the positive effect of lower discount rates with respect to the previous year (+€99 million)



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

#### Change

#### **Description**

#### **Expected return**

• Includes the impact of the unwinding of the discount rate, which amounted to €33 million, and the expected after-tax investment return on the beginning-of-the year adjusted net asset value, net of the cost of capital (+€38 million)

# Deviation of actual value from expectations

- Includes primarily:
  - a lower-than-expected actual profit
  - higher-than-expected lapse rates

#### **TVFOGs**

• The positive variation in the TVFOGs is due to a lower duration of with-profit portfolios, which offsets the negative impact of lower interest rates



## Value added by new business

#### Development of the value added



Value added by new business (€ million)

── Margin over PVNBI (%)

#### Key highlights

Decrease in the volume of new policies in the bank channel, offset by the good issuance of Life-Savings products in the agents' channel



2 Increase in the projected lapse rate

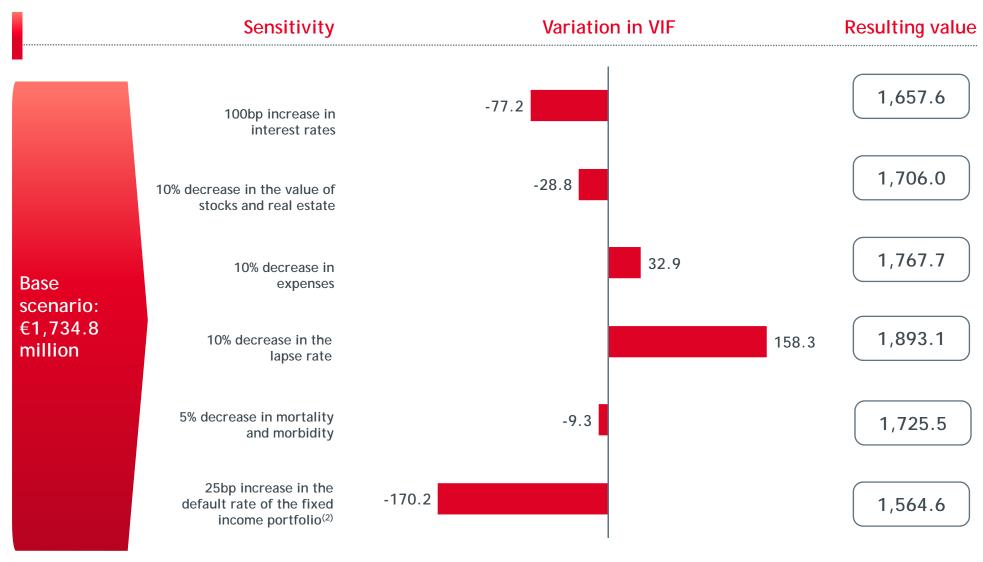


Lower relative weight of Life-Protection insurance





## Sensitivity analysis of the value of in-force business<sup>(1)</sup>

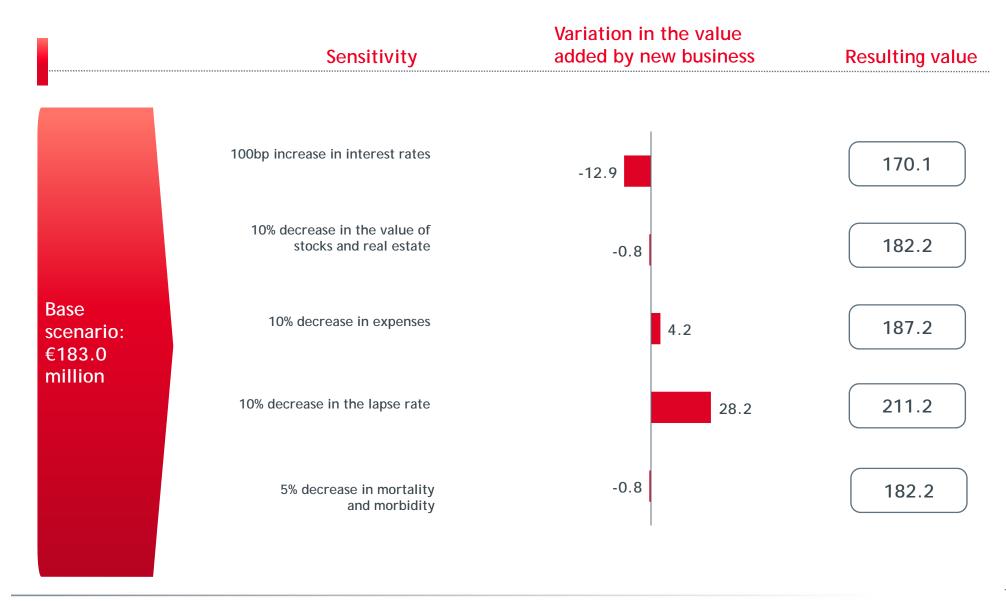


<sup>1)</sup> VIF = PVIF - TVFOGS - CoC

<sup>2)</sup> The 25bp increase represents a probability of default of 0.7 times that applied to the whole fixed income portfolio included in the credit risk adjustment to the VIF



## Sensitivity analysis of the value added by new business





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22 July 2013 Mapfre S.A. Carretera de Pozuelo 52 Edificio 1 28222 Majadahonda (Madrid)

Dear Sirs.

#### Opinion letter - EEV results of certain subsidiaries of Mapfre, S.A. as at 31 December 2012

- 1 Towers Watson Risk Consulting (Spain), S.A. ("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 Maofre. S.A. as at 31 December 2012.
- 2 The EV results have been prepared by Mapfre, S.A. to comply with the European Embedded Value Principles and Guidance issued by the CFO Forum in May 2004 (the "EEV Principles").
- 3 The EV results of Mapfre, S.A. cover the business of Mapfre Vida, S.A. de Seguros y Reaseguros sobre la Vida Humana ("Mapfre Vida") and its subsidiaries:
  - Mapfre Caja Madrid Vida, S.A de Seguros y Reaseguros;
  - 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.;
  - Bankinter Seguros de Vida, SA de Seguros y Reaseguros;
  - CatalunyaCaixa Vida, S.A de Seguros y Reaseguros;
  - CCM Vida y Pensiones S.A. de Seguros y Reaseguros:
  - Unión del Duero. Compañía de Seguros de Vida. S.A. ("Unión Duero Vida"): and
  - Duero Pensiones, entidad gestora de fondos de pensiones, S.A. ("Unión Duero Pensiones").

#### Scope

- 4 The EV results have been prepared by Mapfre S.A. and its subsidiaries, except that the embedded value results for Unión Duero Vida and Unión Duero Pensiones have been calculated by Towers Watson.
- 5 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 EEV Principles.
- 6 Towers Watson has also reviewed the 2012 EV and new business value results, the sensitivities and the EV earnings in 2012 prepared by Mapfre S.A, as shown on pages 3, 11 and 12 of the presentation.

Towers Wiston Risk Consulting (Spain) S.A. R.M. de Medrid Tomo 16265, folio 60, sección 8, hoje M-316524, inscripción 1. CIF A-83465161
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TOWERS WATSON TO

Mapfre S.A. 22 July 2013

#### Conclusions

- Subject to the exception noted below, Towers Watson has concluded that the methodology and assumptions used to determine the 2012 EV and value of new business comply with the EEV Principles. The exception referred to above is that at year-end 2012 the basis may be considered to make insufficient allowance for the aggregate risks in relation to the savings business, and in particular the allowance made, directly and indirectly, for credit risk in respect of the existing fixed interest assets, as described on page 18 of this presentation. The impact on the 2012 EV results of a larger allowance for credit risk is shown in the sensitivity analysis.
- 8 Further, based on a high-level review of the results of the calculations, but without undertaking detailed checks on the models and processes involved, Towers Watson considers that any issues discovered do not have a material impact on the embedded value, analysis of embedded value earnings, value of new business and sensitivity tests.
- 9 Our work and this letter are subject to the reliances and limitations contained in paragraphs 10 to 15 of this letter. The work is based on information received up to and including 19 July 2013.

#### Reliances and limitations

- 10 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 Towers Watson's engagement letter. To the fullest extent permitted by applicable law, Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than 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.
- 11 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 Towers Watson that would materially affect the opinion set out herein.
- 12 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, salesforce 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.
- 13 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 olaims 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.
- 14 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 Towers Watson that the assumptions made in this letter will be reflected in actual experience.
- 15 The results shown do not consider possible financial implications arising from the introduction of new regulatory reporting requirements which may, for example, increase the level of capital support required to sustain the business or constrain the way in which the assets are invested.

Yours sincerely

P.

Felipe Gómez Rojas

 $X. Spein Seguros (Compafias) Mapfre seguros (EVReview 2012/04\_Deliverables) (02\_Final\_Deliverables) Cartas (Letter EV 2012 Mapfre documents) and the seguros (EVReview 2012/04\_Deliverables) (02\_Final\_Deliverables) (02\_Fin$ 



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#### Covered business

- The 2012 embedded value was calculated for all business produced by MAPFRE VIDA and its subsidiaries, which includes the following blocks of business:
  - Life assurance (including complementary) and accidental death insurance businesses of MAPFRE VIDA, sold through the agents' channel
  - Life assurance (including complementary) and accidental death insurance businesses of MAPFRE-CAJA
     MADRID VIDA
  - Life assurance (including complementary), accidental death insurance and pension funds businesses of CATALUNYACAIXA, CCM VIDA Y PENSIONES, BANKINTER SEGUROS DE VIDA, UNIÓN DUERO VIDA and DUERO PENSIONES
  - Mutual funds and pension funds 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")

#### Non-covered business

 The MAPFRE Group operates Life Assurance business in several geographies which have not been included in the FFV 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) = PVIF TVFOGs CoC
- A bottom-up approach was followed to comply with EEVP, valuing separately each risk component in the business, since it was deemed that this methodology provides the most transparent information about shareholder value, better quantifies the risk in each product, differentiating between in-force and new business

#### Adjusted Net Asset Value:

 The Adjusted Net Asset Value or "ANAV" is equal to shareholders' equity as defined under IFRS, adjusted for: committed donations and dividends; goodwill; deferred expenses; and any other item needed to calculate the economic value of capital

#### Present Value of In-force Business:

- The Present Value of In-force Business or "PVIF" 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 euroswap curve. Investment returns for existing business have been calculated on the basis of the euroswap curve except for existing fixed interest assets backing the Life-Savings business, where book returns adjusted for credit risk based on historical transition matrices and defaults rates have been used. Life-Savings business VIF represents 7.7% of the total EEV. PVIF includes the intrinsic value of financial options and guarantees granted to the insured.
- Financial returns on future investments have been calculated on the basis of the euroswap curve.



#### Credit risk allowance:

- By year-end 2012, the spread of 10Y Spanish government bonds vs. the swap curve increased to around 400 basis points from around 320 basis points at year-end 2011. In our opinion this reflects the uncertainty concerning Spain's economic development, but not a manifest event with any of the Spanish State's outstanding debt instruments.
- Our Life-Savings business is covered in part by Spanish government bonds and, in our opinion, it is not significantly exposed to spread widening, since in its vast majority is a business where:
  - assets and liabilities are matched
  - assets are held over the lifetime of the commitments to cover best estimate liabilities
  - surrender values (prior to maturity) are equal to the market value of assets at the moment of said surrender plus, in some cases, a fee
- In addition, our Spanish Life assurance technical reserves are backed by an investment grade fixed-income portfolio<sup>(1)</sup>, split by credit ratings as follows<sup>(2)</sup>:

AAA: 1%AA : 5%A : 17%BBB : 76%

- Although this portfolio is exposed to default risk, calculating whether and how the spread can be broken down into credit risk factors and other factors is difficult using forward looking information (e.g. yields available on various bond markets, bid-ask spreads, turnover information, CDS prices, credit ratings) as well as retrospective information (e.g. actual defaults). Both techniques present significant weaknesses. Based on these considerations, and for consistency with previous years EEV reporting, we have taken a similar approach for credit risk as in the 2010 and 2011 EEV in relation to existing fixed-income assets backing Life-Savings business:
  - Book returns have been adjusted for the expected default risk based on the last 10-year average historical default rates published by the rating agency Standard and Poor's (hereafter <u>S&P</u>), stressed by a factor of 4.50x for year 2013 and 2.15x for 2014, to allow for a possible increase in default rates stemming from the global financial crisis. Moreover, the default assumption has been additionally adjusted by 1.24x to reflect the increase in the spread of the fixed income portfolio over the swap curve in 2012. This yields a deduction for expected default risk equivalent to an average annual rate of 34bp (15bp in the EEV 2011).
  - An implicit allowance for unexpected credit risk has been made in the CoC.
- In order to show the impact on the EEV results of a higher allowance for credit risk, we have provided a sensitivity analysis of a 25bp increase in the probability of default of the fixed income portfolio backing the Life-Savings business.



#### TVFOGs:

- Under EEVP, FOGs (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 FOGs is valued through the measurement of two different elements:
  - intrinsic value: the cost of FOGs under existing conditions at the valuation date
  - time value: the change in the cost of FOGs resulting from potential changes in policyholders' benefits that may occur throughout the life of the policy
- The intrinsic value of FOGs is already recognised implicitly in the calculation of the PVIF. It is therefore necessary to include the additional cost arising from the time value of FOGs (TVFOGs).
- TVFOGs was calculated for the main FOGs in the covered Life business. Specifically, the calculation focused on the TVFOGs corresponding to the guaranteed interest rate in with-profits products.
- The calculation of TVFOGs 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 31.12.2012
- TVFOGs is based on 2,000 stochastic simulations of market-consistent financial assumptions 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.



#### CoC:

- In line with Spanish market practices, the CoC used in the calculation of the 2012 EEV was measured by applying a 4% fixed rate to the minimum required solvency margin.
- This 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.

#### With-profits business:

- MAPFRE's with-profits in-force business comprises products with the following features that are common in the Spanish insurance market:
  - A minimum return guarantee, ranging between 2.25% and 6% in the case of MAPFRE.
  - A profit-sharing mechanism defined as: X% of (Financial return minimum guaranteed return expense loadings) on 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 FOGs.



#### Look through EEVP:

- In order to assign correctly 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 EEV 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 EEV 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.



#### Value added by new business:

- In Life assurance, new business is defined as single, extraordinary and regular premiums written in the year, as well as extraordinary contributions to existing policies. 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, TVFOGs and CoC, valued at year-end using the assumptions applicable at that point in time.

#### **Assumptions**

Discount rate

## **EEV 2011**

Euroswap zero-coupon curve as at 31/12/2011

1 year	1.41%
5 years	1.75%
10 years	2.49%
15 years	2.84%
20 years	2.83%

#### Financial returns

Euroswap curve rates except for existing fixed interest - Existing assets assets backing Life-Savings business, where book

returns adjusted for credit risk based on historical transition matrices and defaults rates have been used

Based on the euroswap zero-coupon - Reinvestment yield curve as at 31/12/2011

- Based on internal analyses Maintenance expenses

- Expressed in Euros per policy - Indexed to a 2.5% inflation

- There are no exceptional expenses to be excluded

In line with the existing fee structure Fees and commissions

Mortality, disability, surrenders and turnovers

Tables based on the company's own experience

#### Cost of capital

- Capital requirement

- Annual cost

Tax rate

Stochastic asset model (TVFOGs)

100% of the minimum solvency margin

4% p.a.

30%

Market-consistent using swaption implied

volatilities as at 31/12/2011

#### **EEV 2012**

Euroswap zero-coupon curve as at 31/12/2012

1 year	0.33%
5 years	0.77%
10 years	1.61%
15 years	2.09%
20 years	2.26%

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 defaults rates have been used

Based on the euroswap zero-coupon curve as at 31/12/2012

- Based on internal analyses
- Expressed in Euros per policy
- Indexed to a 2.5% inflation
- There are no exceptional expenses to be excluded

In line with the existing fee structure

Tables based on the company's own experience

100% of the minimum solvency margin 4% p.a.

30%

Market-consistent using swaption implied volatilities as at 31/12/2012



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## Breakdown of the value added by new business

#### Breakdown by business line

	PVNE	PVNBI <sup>(1)</sup>		B <sup>(2)</sup>	VNB/PVNBI	
	2011	2012	2011	2012	2011	2012
Life Assurance:	2,857.6	2,675.1	233.2	181.1	8.2%	6.8%
- Agents' channel	1,101.7	1,287.7	46.1	38.5	4.2%	3.0%
- Bank channel	1,755.9	1,387.4	187.1	142.6	10.7%	10.3%
Mutual Funds	465.7	271.9	-2.8	-5.5	-0.6%	-2.0%
Pension Funds	554.5	483.7	7.1	7.4	1.3%	1.5%
- Agents' channel	237.6	212.9	4.1	4.8	1.7%	2.3%
- Bank channel	316.9	270.8	3.0	2.6	0.9%	1.0%
TOTAL	3,877.8	3,430.7	237.5	183.0	6.1%	5.3%

#### Breakdown by distribution channel

	PVNBI <sup>(1)</sup>		VN	VNB <sup>(2)</sup>		VNB/PVNBI	
	2011	2012	2011	2012	2011	2012	
Agents' channel	1,805.0	1,772.4	47.4	37.8	2.6%	2.1%	
Bank channels	2,072.8	1,658.3	190.1	145.2	9.2%	8.8%	
TOTAL	3,877.8	3,430.7	237.5	183.0	6.1%	5.3%	

<sup>1)</sup> Present Value of New Business Income

<sup>2)</sup> Value added by New Business



# Breakdown of 2012 change in EEV between ANAV and value of in-force

business <sup>(1)</sup>	ANAV	Value of in-force business <sup>(1)</sup>	TOTAL
Value in 2011 - Attributable MAPFRE VIDA	545.1	1,281.4	1,826.5
Minority interests	311.6	500.0	811.6
EEV 2011	856.7	1,781.4	2,638.1
Changes in assumptions	0.0	-83.7	-83.7
Expected return	244.6	-173.4	71.2
Value added by new business	-62.8	245.8	183.0
Deviation of actual value from expectations	10.6	-53.3	-42.7
Change in the TVFOGs <sup>(2)</sup>	0.0	3.1	3.1
Value added in 2012	192.4	-61.5	130.9
Changes in the model	0.0	14.9	14.9
Dividends paid and other items	-179.0	0.0	-179.0
Value in 2012	870.1	1,734.8	2,604.9
Minority interests	303.4	504.9	808.3
Value in 2012 - Attributable MAPFRE VIDA	566.7	1,229.9	1,796.6

RoEV <sup>(3)</sup>	22.5%	-3.4%	4.9%

<sup>1)</sup> VIF = PVIF - TVFOGs - CoC

<sup>2)</sup> Not considering TVFOGs from new business, which are considered in the line "Value added by new business"

<sup>3)</sup> Return on Embedded Value» = Value added in the year/ Embedded Value 2011, adjusted for changes in the model



## Breakdown of the sensitivity analysis

#### Sensitivity of the value of in-force business

	Agents' channel	Bank channel
Impact of:		
- 100bp increase in interest rates	-30.0	-47.2
- 10% decrease in the value of stocks and real estate	-27.4	-1.4
- 10% decrease in expenses	13.0	19.8
- 10% decrease in the lapse rate	79.1	79.2
- 5% decrease in mortality and morbidity	-19.5	10.2
- 25bp increase in the defaut rates of the sovereign fixed income portfolio	-99.4	-70.7

#### Sensitivity of the value added by new business

	Agents' channel	Bank channel
Impact of:		
- 100bp increase in interest rates	-4.3	-8.6
- 10% decrease in the value of stocks and real estate	-0.8	0.0
- 10% decrease in expenses	0.9	3.3
- 10% decrease in the lapse rate	13.5	14.6
- 5% decrease in mortality and morbidity	-3.9	3.1



## Reconciliation of the adjusted net asset value

Consolidated shareholders' equity for MAPFRE VIDA as at 31/12/12 (IFRS)	1,214.8	
Unrealised gains	2.8	
- of which: property	31.9	
- of which: financial assets	-29.1	
Donations and dividends	0.0	
Intangible assets	-652.1	
Commissions and other acquisition costs net of taxes	0.0	
Other	1.2	
Consolidated adjusted shareholders' equity for MAPFRE VIDA as at 31/12/12 <sup>(1)</sup>	566.7	
Minority interests	303.4	
Consolidated adjusted net asset value for MAPFRE VIDA as at 31/12/12 <sup>(1)</sup>	870.1	



## Share of the parent company in the EEV

	Parent company - MAPFRE VIDA	Minority interests
ANAV		
ANAV	566.7	303.4
NET PVIF		
AGENTS' CHANNEL	814.5	0.0
BANK CHANNELS	515.2	510.9
TOTAL	1,329.7	510.9
TVFOGS		
AGENTS' CHANNEL	-93.8	0.0
BANK CHANNELS	-6.0	-6.0
TOTAL	-99.8	-6.0
EEV 2012	1,796.6	808.3



## Share of the parent company in the value added by new business

	Parent company - MAPFRE VIDA	Minority interests
Value added by new business		
AGENTS' CHANNEL	37,8	
BANK CHANNELS	72,9	72,3
2012 Value added by new business	110,7	72,3



## Breakdown of the EEV 2012 attributable to the parent company - MAPFRE VIDA

# By line of business

	€ mill.	%	△ %
Adjusted Net Asset Value	566.7	31.5%	4.0%
Net PVIF <sup>(1)</sup> - Life Assurance <sup>(2)</sup>	1,048.1	58.3%	-4.7%
- PVIF	1,233.4		-3.6%
- CoC	(185.3)		3.5%
Net PVIF <sup>(1)</sup> - Mutual Funds	78.3	4.4%	-0.1%
- PVIF	79.4		-0.1%
- CoC	(1.1)		0.0%
Net PVIF <sup>(1)</sup> - Pension Funds	203.3	11.4%	-1.4%
- PVIF	211.3		-2.9%
- CoC	(8.0)		-30.4%
TVFOGs	(99.8)	-5.6%	-3.3%
EEV 2012	1,796.6	100.0%	-1.6%

#### By distribution channel

	€ mill.	%	△ %
Adjusted Net Asset Value	566.7	31.5%	4.0%
Net PVIF - Agents' channel	814.5	45.4%	-6.3%
- PVIF	944.4		-5.2%
- CoC	(129.9)		2.0%
Net PVIF - Bank channels	515.2	28.7%	0.0%
- PVIF	579.7		0.0%
- CoC	(64.5)		0.1%
TVFOGs	(99.8)	-5.6%	-3.3%
EEV 2012	1,796.6	100.0%	-1.6%

<sup>1)</sup> PVIF = "Present Value of In-Force business"

<sup>2)</sup> Includes the in-force values of the Life assurance and accidental death insurance businesses



# Content

- EEV analysis
- Towers Watson opinion letter
- 3 Methodological appendix
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- **5** Glossary



- The European Embedded Value Principles or "EEVP" are the principles that establish the methodology that must be applied in order to calculate the European Embedded Value. The EEVP 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 EEVP can be obtained at the following Internet address: 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 "FOGs" 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 In-force Business or "PVIF" 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 euroswap curve. Investment returns for existing business have been calculated on the basis of the euroswap curve, except for existing fixed interest assets backing Life-Savings business, where book returns adjusted for credit risk based on historical transition matrices and defaults rates have been used. PVIF 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 2012 EEV 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: PVIF Time Value of FOGs ("TVFOGs") CoC.
- The European Embedded Value or "EEV" is the embedded value calculated in accordance with "European Embedded Value Principles". EEV is equal to: ANAV + VIF.
- Embedded value earnings are defined as the change in embedded value during the period, including dividends paid and excluding capital injections, and provide a measure of the economic performance during the year.
- 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.
- Deviation of Actual Value from Expectations arise mainly from the variance between the actual experience during the year 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.



- 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; 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, TVFOGs and CoC, valued at year-end using the assumptions applicable at that point in time.



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