

Mediolanum S.p.A.

# Mediolanum Group Embedded Value 2013

**Supplementary Information** 

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### Disclaimer

In calculating embedded value information of the Group, numerous assumptions (some of which are shown below) are required concerning the Mediolanum Group's business with respect to industry performance, business and economic conditions and other factors, many of which are outside the Group's control. Although the assumptions used represent estimates that the Mediolanum Group believe are appropriate for the purpose of embedded value reporting, future operating conditions may differ, perhaps significantly, from those assumed in the calculation of the embedded value. Consequently, the inclusion of embedded value herein should not be regarded as a statement by the Mediolanum Group or any other party, that the stream of future after-tax profits discounted to produce the embedded value will be achieved.

## **1. INTRODUCTION**

#### **1.1 Basis of preparation**

This Supplementary Information document provides details of the methodology, assumptions and results of the embedded value calculations for the Mediolanum Group as at December 31, 2013.

Mediolanum has presented embedded value information in relation to all the Group's business for many years and adopted the European Embedded Value ("EEV") Principles with the publication of its full year 2005 results. Since 2008 Mediolanum adopted the European Insurance CFO Forum Market Consistent Embedded Value Principles<sup>1</sup> ("MCEV Principles"), published in October 2009, in respect of all its life insurance and related business (see "covered business" below).

To provide meaningful information regarding the value and value generating capability of the Group, in addition to preparing a disclosure which is fully compliant with the MCEV Principles, in respect of all the other non-covered businesses of the group, Mediolanum has chosen to provide additional information – Group Embedded Value – which considers all the operating lines of business of the Group in a consistent fashion.

Throughout this Supplementary Information, the following terminology is used:

- MCEV: a measure of the consolidated value of shareholders' interests in the covered business, equal to the sum of adjusted shareholders' net assets allocated to covered business and the value of in-force covered business, developed in accordance with the MCEV Principles
- Group MCEV: a measure of the consolidated value of shareholders' interests in covered and non-covered business, which is equal to the sum of the MCEV for covered business and the unadjusted IFRS net asset value for non-covered business, as required by the MCEV Principles
- Group Embedded Value: a measure used by Mediolanum to assess the value of shareholders' interests in the value of the entire Group, including the impact of marking to market, where appropriate, of other assets and liabilities relating to noncovered business, the elimination of intangible assets such as goodwill, and the inclusion of the value of in-force asset management and Italian banking businesses

Mediolanum has continued to work closely with Towers Watson to develop its methodology, and Towers Watson has undertaken a review of the embedded value of the Group as at December 31, 2013. Towers Watson's opinion is provided in section 9 of this Supplementary Information disclosure.

The directors of Mediolanum S.p.A. acknowledge their responsibility for the preparation of this Supplementary Information and confirm that the information contained herein has been prepared in accordance with the MCEV Principles. This disclosure should not be considered as a substitute for the Mediolanum Group's primary financial statements.

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#### **1.2 Covered and non-covered business**

The Mediolanum Group's primary IFRS reporting provides for six segments: Insurance Italy, Banking Italy, Asset Management Italy, Other Italy, Spain and Germany.

The covered business to which the MCEV methodology has been applied includes all the life insurance business written in Italy and in foreign countries (primarily Spain) consistent with this business segment under the primary IFRS reporting. Values are reported on a "look-through" basis, considering all profits and losses emerging in the Group associated with the life line of business, which is consistent with the IFRS reporting segment.

Life product categories included are:

- 'Freedom' life business in Italy
- Other Italian traditional business (net of external reinsurance)
- Unit-linked business
- Index-linked business

No value has been attributed in the MCEV to in-force or new business for other lines of business. In Group MCEV these lines of business are considered on an unadjusted IFRS basis in accordance with the MCEV Principles, whereas in Mediolanum's Group Embedded Value, asset management and Italian banking business have been considered on an embedded value basis. During March 2013 Mediolanum S.p.A. acquired Mediolanum Assicurazioni SpA, the non-life insurance company that is now part of the Group. No value has been calculated for this entity which has been treated, as for other lines of business, on an unadjusted IFRS basis in both the Group MCEV and Group Embedded Value. The other change on the Group Embedded Value perimeter as at December 31, 2013, compared to the previous year, is related to the banking business: no value has been attributed in the Group Embedded Value to in-force or new business of the deposit accounts business. This change in banking business perimeter is due to the nature of the business, that is an ancillary service of the current accounts and not a separate line of business, and to the volatile duration of the business. Mediolanum has calculated the results for its life, asset management and banking businesses distributed in Italy and life and asset management businesses distributed in Spain. Towers Watson has continued to calculate the embedded value information which has not been internalised, mainly the adjustments to net asset value and the analysis of earnings.

#### **1.3 MCEV definitions**

MCEV represents the present value of consolidated shareholders' interests in the earnings distributable from assets allocated to covered business after sufficient allowance for the aggregate risks in the covered business. The allowance for risk has been calibrated to reflect the market price for risk, where observable. In particular, the MCEV consists of the following components:

- Free surplus allocated to the covered business ("FS")
- Required Capital necessary to support the business ("RC")
- Value of in-force covered business ("VIF"), which consists of the following components:

- (+) Present value of future profits: after-tax shareholder's profits from the in-force covered business ("PVFP")
- o (-) Time value of financial options and guarantees ("TVOG")
- (-) Frictional costs of required capital ("FCoC")
- o (-) Cost of residual non-hedgeable risks ("CNHR")

The sum of FS and RC is equal to the Adjusted Net Asset Value ("ANAV").

Refer to section 7 (Methodology) of this Supplementary Information for a more detailed description of these components.

## 2. HIGHLIGHTS

#### 2.1 Group Embedded Value

The following table shows the MCEV, Group MCEV and Group Embedded Value as at December 31, 2013, together with the values as at December 31, 2012 and the related restatement.

#### Group Embedded Value as at December 31,

€/m	2012	2012R	2013
unadjusted IFRS NAV (covered business)	607	607	570
adjustments to NAV (covered business)	(78)	(78)	(83)
value of in-force life business	1,335	1,335	1,313
MCEV (covered business)	1,864	1,864	1,800
unadjusted IFRS NAV (non-covered business)	814	814	1,080
GROUP MCEV	2,678	2,678	2,880
adjustments to NAV (non-covered business)	(25)	(25)	(6)
value of in-force asset management business	711	711	944
value of in-force banking business	114	101	181
GROUP EMBEDDED VALUE	3,478	3,465	3,999

Two years ago, Mediolanum changed the methodology used in the valuation of its shareholding in Mediobanca in order to be consistent with the IFRS accounts where an independent assessment is consolidated using the net equity method. Note that the entire Mediobanca shareholding is in the non-covered business. Furthermore during 2013 Mediolanum internalised the valuation of the Spanish asset management and the Italian banking businesses. The restated 2012 figures show the impact on the Group Embedded Value of the change in banking business valuation due to exclusion of the deposit accounts business and other methodological changes in the derivation of the current accounts business assumptions.

On a like-for-like basis, Group Embedded Value increased by 15% mainly due to an increase in the IFRS NAV and to an increase in the value of the in-force business asset management and banking although there has been a decrease in the value of the life insurance business.

### **2.2 Value of new business**

The following table shows the value at moment of sale of the Mediolanum Group's new business in 2013, together with equivalent values published in 2012. New life business comprises new life insurance policies sold during the period, excluding those resulting from the transformation or switch of existing policies, together with discretionary increases in the level of regular premiums on existing policies. New asset management business is defined as the sum of retail gross inflows net of internal switches within the

mutual funds. New Italian banking business comprises the new money collected in the period relating to current accounts opened in the year and the volume of new mortgages issued and new structured bonds issued in the year.

#### Value of new business

€/m	2012	2013
Life insurance business	10	31
Asset management business	193	288
Italian banking business	47	26
VALUE OF NEW BUSINESS	250	345

Group new business value increased by 38%. The increase occurred in life insurance and asset management businesses, while on banking business there has been a negative impact. The increase for the asset management business resulted from increased new business volumes in 2013. The positive effect on life insurance is mainly generated by the lower weight of the acquisition costs compared to total operating costs thanks to the flexible operating structure.

#### 2.3 Group Embedded Value Earnings

Group Embedded Value earnings, which are defined as the change in Group Embedded Value for the year, adjusted for the payment of dividends and other capital movements, provide a measure of performance during the year. The following table shows the Group Embedded Value earnings for 2012 and 2013.

#### **Group Embedded Value Earnings**

€/m	2012	2013
Change in embedded value for the period	731	534
Dividends paid or accrued	103	132
Other capital movements	(3)	(6)
GROUP EMBEDDED VALUE EARNINGS	831	660

Group Embedded Value earnings consist of the following components:

- The expected return on embedded value at the start of the year ("expected return")
- Operating variances during the period ("operating experience variances"), caused by differences between the actual operating experience of the period and the assumptions used to calculate the embedded value at the start of the year, before the impact of new sales during the period. A change in model item, which includes the changes to models to reflect improvements or rectify errors, is included in this step
- The impact of changes in assumptions at the end of the period for operating experience ("operating assumption changes")
- Variances and changes in assumptions regarding future experience used to calculate the value of in-force business at the end of the period relating to economic conditions ("economic variances and assumption changes")

The "value added by new business", calculated at the moment of sale using the end of period assumptions

The following table shows the components of the Group Embedded Value earnings in 2012 and 2013.

€/m	2012	2013
Expected return	194	112
Operating experience variances	30	33
Operating assumption changes	(42)	(168)
Economic variances and assumption changes	399	338
EARNINGS ON INITIAL GROUP EMBEDDED VALUE	581	315
Value of new life business	10	31
Value of new asset management business	193	288
Value of new Italian banking business	47	26
VALUE ADDED BY NEW BUSINESS	250	345
GROUP EMBEDDED VALUE EARNINGS	831	660

## Components of Group Embedded Value Earnings

#### Description of key Group Embedded Value earnings items in 2013

Expected return was lower in 2013 than in 2012 due to the higher interest rates as at December 31, 2011 relative to those as at December 31, 2012.

Operating experience variances gave rise to an increase in the embedded value earnings for the year of 33 million Euro, with the main components being:

- higher performance commissions than those assumed (60 million Euro)
- a positive variance of 36 million Euro attributable to asset management persistency experience
- a slight negative variance in life business persistency and paid-up experience (4 million Euro)
- a negative variance of 11 million Euro due to extraordinary expenses
- a negative tax variance due to a contingent liability for extraordinary tax provision for tax litigation (-53 million Euro).

The remaining effects comprise a series of smaller positive and negative items.

The negative impact of changes to operating assumptions (approximately 168 million Euro) is mainly due to higher maintenance expense parameters. This is due to a different expense allocation between acquisition and maintenance expenses, in particular for life business. The different allocation between acquisition and maintenance expenses is the result of Mediolanum's operational model and strategic and business decisions. During 2013 the inflows on asset management business increased significantly, to the detriment of the inflows on life insurance business. The resulting change in expense assumptions is due to the Group operational flexibility, in line with the increased prevalence of asset management and banking activities of the financial conglomerate compared to insurance activities.

The positive impact of economic variances and assumption changes (approximately 338 million Euro) is mainly due to the improvement in the economic environment, particularly as regards the reference rates and the economic experience variances mainly related to a higher market value of the assets in 2013.

The value added by new life business in the period was 31 million Euro.

The value added by new asset management business in the period was 288 million Euro, almost entirely related to business distributed in Italy.

New Italian banking business added 26 million Euro, related mostly to proprietary mortgages and structured bonds.

### 3. MCEV COVERED BUSINESS

#### 3.1 Market-consistent embedded value (MCEV)

The following table shows the market-consistent embedded values for covered business as at December 31, 2013 and the 2012 value.

#### MCEV as at December 31,

€/m	2012	2013
free surplus	249	277
required capital	280	210
ADJUSTED NET ASSET VALUE (COVERED BUSINESS)	529	487
present value of future profits	1,465	1,452
time value of financial options and guarantees	(2)	(5)
frictional costs of required capital	(12)	(13)
cost of residual non-hedgeable risks	(116)	(121)
VALUE OF IN-FORCE COVERED BUSINESS	1,335	1,313
MARKET-CONSISTENT EMBEDDED VALUE	1,864	1,800

The adjusted net asset value for covered business shown above is equal to the shareholders' net asset value attributed to the covered life business, determined initially on an IFRS basis, before the distribution of dividends payable in the following year, after a series of adjustments.

As part of the adoption of the MCEV Principles, Mediolanum has identified an adjusted net asset value in relation solely to the covered business.

In accordance with the MCEV Principles, Mediolanum has allocated assets and liabilities to the covered business, using its primary IFRS accounting basis, based on a perimeter which includes all the life operating companies of the Group, net of the shareholding in Mediobanca, that part of the Group's goodwill associated with the acquisition of Banco Mediolanum and Gamax and related to life business, together with the component of the life segmental profits of the year which emerges in other group companies. The unadjusted Life IFRS net asset value is thus calculated in a manner consistent with the Group's overall IFRS shareholder's net equity.

Adjustments are then required to the unadjusted Life IFRS net asset value, primarily to reflect the after-tax impact of (i) the elimination of intangible assets, mainly goodwill, primarily that related to Banco Mediolanum and Gamax (ii) marking to market value any assets not considered on a market value under IFRS, (iii) the exclusion of the accounting items relating to unrealised gains in the life segregated funds, whose projected emergence over time is included in the value of the in-force life insurance business and the reversal of accounting items related to life insurance products classified under IAS 39 for which the value of in-force business is determined using the statutory profits.

The following table shows the reconciliation between the Life IFRS net asset value and adjusted shareholders' net asset value for covered business as at December 31, 2012 and 2013.

Reconciliation of adjusted net asset value and Life IFRS net asset value		
€/m	2012	

Unadjusted life IFRS net asset value	606	570
Goodwill and other intangible assets	(84)	(84)
Marking to market of assets	16	10
Accounting items	(9)	(9)
ADJUSTED NET ASSET VALUE (COVERED BUSINESS)	529	487

#### 3.2 Value of new business

New covered business comprises new life insurance policies sold during the period, excluding those resulting from the transformation or switch of existing policies, together with discretionary increases in the level of regular premiums on existing policies.

The value of new business has been determined at the moment of sale using the endyear economic and non-economic assumptions, including all acquisition-related costs. The following table shows the value added by new business 2013, compared to the value of 2012 new business.

#### Value of new covered business

€/m	2012	2013
Freedom life business	(5)	(0)
Other traditional life business	0	(1)
Unit-linked life business	14	29
Index-linked life business	1	3
VALUE OF NEW COVERED BUSINESS	10	31

The value of new unit-linked business increased mainly due to the expense assumptions changes with lower allocation to acquisition expenses.

As far as the index-linked policies are concerned, they are now sold only in Spain, following the issue of ISVAP Regolamento 32 in Italy.

The profitability of the Freedom Life business is negligible due to a sales reduction.

#### 3.3 New business margins

New business margins for the Italian life business in 2013 and 2012 are shown in the tables below. Profitability is expressed both in terms of a margin on APE (annual premium equivalent defined as annualised regular premiums plus 10% of single premiums) and as a percentage of PVNBP (present value of new business premiums), calculated using the same assumptions, in particular the lapse and the reference rates, and projection periods that are consistent with those used to calculate the value of new business.

2013

€/m	Freedom & Other Traditional	unit linked pension plans	Other Unit- linked policies
Value of new business at moment of sale	(0)	13	6
Regular premiums / pac	0	11	12
Single premiums / pic	35	25	77
APE	3	14	20
New business margin (% APE)	(4.8%)	96.5%	31.1%
PVNBP	35	168	170
New business margin (% PVNBP)	(0.5%)	7.9%	3.7%
Average annual premium multiplier	n/a	12.6	7.5

#### New business margins in 2013 – Italian life business

The margins on APE and PVNBP for new life business in Spain are approximately 50.1% and 7.4% respectively in 2013.

The following table shows the new business margins in Italy for 2012.

#### New business margins in 2012 – Italian life business

€/m	Freedom & Other Traditional	unit linked pension plans	Other Unit- linked policies
Value of new business at moment of sale	(5)	3	4
Regular premiums / pac	0	12	16
Single premiums / pic	713	22	121
APE	71	15	28
New business margin (% APE)	(6.7%)	18.1%	13.3%
PVNBP	713	184	261
New business margin (% PVNBP)	(0.7%)	1.4%	1.4%
Average annual premium multiplier	n/a	13.2	8.8

The following table provides a reconciliation of the Italian new business premium volumes as used in the calculation of the value of new business, APE and new business margins, with the published new business premiums as provided in the 2013 Annual Report.

#### Reconciliation of Italian life new business premium volumes in 2013 €/m Annual premiums Single premiums Published new business volumes 23 136 Surrenders of first year premiums 0 0 Alignment of timing of premiums 0 1 MCEV NEW BUSINESS VOLUMES 24 136

#### **3.4 Analysis of MCEV earnings**

The following table shows the MCEV earnings of the Mediolanum covered business in 2013 shown in the format required by the MCEV Principles.

#### Analysis of MCEV earnings in 2013

€/m	Free Surplus	Required Capital	VIF	MCEV
Opening MCEV	249	280	1,335	1,864
Opening adjustments	0	0	0	0
Adjusted opening MCEV	249	280	1,335	1,864
New business value	0	0	31	31
Expected existing business contribution (reference rate)	1	0	14	15
Expected existing business contribution (in excess of reference rate)	31	2	28	61
Transfers from VIF and RC to FS	185	(61)	(124)	0
of which on existing in-force business	186	(65)	(125)	0
of which on new business	0	4	(4)	0
Experience variances	(17)	(16)	(7)	(40)
Assumption changes	0	0	(150)	(150)
Other operating variance	(6)	0	(6)	(12)
Operating MCEV earnings	195	(75)	(215)	(95)
Economic variances	(10)	5	193	188
Other non operating variance	0	0	0	0
TOTAL MCEV EARNINGS	185	(70)	(22)	93
Closing adjustments	(157)	0	0	(157)
CLOSING MCEV	277	210	1,313	1,800

The analysis of the MCEV earnings components includes the following:

- New business value calculated at the moment of sale using the end of period assumptions
- Expected existing business contribution (reference rate): this item represents the expected return on the embedded value at the start of the year, using the reference rate at the beginning of the period, comprising the expected earnings on free surplus and required capital and the expected change in the value of in-force business
- Expected existing business contribution (in excess of reference rate): this item represents the additional expected return compared to the reference rate, determined using a series of real-world economic assumptions (shown in section 8.3) which are consistent with managements' expectation of the business at the start of the year
- Transfers from VIF and RC to FS: this item shows the effect of the releases and the corresponding transfers of profits underlying the in-force value, the new business value and the required capital to the free surplus; the overall impact on the MCEV is zero
- Experience variances: variances during the period caused by differences between the actual experience of the period and the assumptions in respect of operating experience used to calculate the embedded value at the start of the year before the impact of new sale during the period

- Assumption changes: the impact of changes in assumptions at the end of the period for operating experience
- Other operating variance: this item includes the changes to models to reflect improvements or rectify errors

Operating MCEV earnings: This item represents the MCEV earnings arising as the sum of the above elements.

• Economic variances: the impact caused by the difference between the actual performance in the period of the assets underlying the MCEV and the assumptions at the beginning of the period and the impact of changes in economic conditions

Total MCEV earnings: this item summarises the overall MCEV earnings of the year

• Closing adjustments: represent capital movements and is due to the capital injections net of the dividends paid (and other capital movements) with reference to the covered business perimeter

Closing MCEV: is the total MCEV as at December 31, 2013.

## 4. GROUP MCEV

Group MCEV represents the sum of the MCEV for covered business and the unadjusted IFRS net asset value for non-covered business, as required by the MCEV Principles. No other adjustments, to allow for example for marking to market of other assets and liabilities, or the inclusion of the value of in force of other business, are allowed in Group MCEV. These items are considered in Group Embedded Value and discussed in the following section 5 (Non-covered business).

The following table shows the analysis of Group MCEV earnings for 2013 in the format required by the MCEV Principles.

€/m	Covered business MCEV	Non covered business IFRS	Total Group MCEV
Opening Group MCEV	1,864	814	2,678
Opening adjustments	0	0	0
Adjusted opening Group MCEV	1,864	814	2,678
Operating MCEV earnings	(95)	223	128
Non-operating MCEV earnings	188	0	188
Total MCEV earnings	93	223	316
Other movement in IFRS net equity	0	11	11
Closing adjustments	(157)	32	(125)
Closing Group MCEV	1,800	1,080	2,880

#### Group MCEV analysis of earnings in 2013

Notes:

- Opening Group MCEV is the value as at December 31, 2012
- All values are shown after tax and minority interests
- Covered business represents the Life Italy IFRS business segment plus the Life part of the Spanish and German IFRS business segments
- Non-covered business represents the remaining Italian IFRS business segments plus the non-Life part of the Spanish and German IFRS business segments
- For non-covered business, IFRS net income (after tax) is shown under operating earnings
- Other Comprehensive Income (after tax) for non-covered business is shown under the item other movement in IFRS net equity
- Covered business reflects 8 million Euro more after-tax profit than the Life Italy IFRS business segment, representing the Life part of the Spanish and German IFRS business segments (excluding goodwill impairment)

## 5. NON-COVERED BUSINESS

As indicated previously, Mediolanum defines Group Embedded Value to include the impact of marking to market, where appropriate, other assets and liabilities relating to non-covered business, the elimination of intangible assets such as goodwill and the inclusion of the value of in-force asset management and Italian banking businesses. Two years ago, Mediolanum changed the methodology used in the valuation of its participation in Mediobanca in order to be consistent with the IFRS accounts where an independent assessment is consolidated using the net equity method. Furthermore during 2013 Mediolanum S.p.A. acquired Mediolanum Assicurazioni S.p.A. that is consolidated in the 2013 embedded value as non-covered business at its IFRS net equity. For the 2013 Group Embedded Value there has been also a change in banking business valuation due to exclusion of the deposit accounts business from the value of in-force and new business.

This section shows details of these items.

#### 5.1 Adjustments to IFRS net asset value

The following table shows the derivation of the relevant adjustments to the unadjusted IFRS net asset value in respect of non-covered business as at December 31, 2012 and 2013.

### Adjustments to net asset value for non-covered business at December 31

€/m	2012	2013
Elimination of goodwill	(45)	(41)
Marking to market of assets	20	35
ADJUSTMENTS TO IFRS NET ASSET VALUE (NON COVERED BUSINESS)	(25)	(6)

Group MCEV considers assets allocated to non-covered business on an unadjusted IFRS basis. In Group Embedded Value, adjustments are necessary in respect of: (i) the elimination of goodwill, relating principally to the remaining parts of the acquisitions of Banco Mediolanum and Gamax not allocated to covered business, and B.A. Lenz, (ii) marking to market, where appropriate, other assets not considered on a market-value basis in IFRS, including property and listed companies held in the Group's IFRS accounts except for Mediobanca, for which an independent assessment was used.

#### 5.2 Value of in-force non-covered business

The non-covered business valued on an embedded value basis comprises asset management business distributed in Italy and Spain, excluding the Banca Esperia joint venture, and Italian banking business. No value has been attributed to in-force or new business for the remaining lines of business, including in particular Mediolanum Assicurazioni, Banca Esperia, Gamax, B.A. Lenz and that part of the Irish operations MILL and MIF not related to Italy and Spain, nor to the other minor lines of business of the Mediolanum Group.

The value of in-force non-covered business has been calculated using an embedded value approach which is consistent with that used for covered business. Values are reported on a look-through basis, considering all profits and losses emerging in the

Group associated with the relevant line of business, which is consistent with their contribution to the relevant IFRS segment.

The following table shows the value of in-force asset management, separated between Italy and foreign business (entirely Spain), and in-force Italian banking business as at December 31, 2013, with 2012 values shown for comparison.

Value of in-force non-covered business as at December, 31 €/m	2012	2013
Italian asset management business	686	910
Spanish asset management business	25	35
Asset management business	711	945
Current account business	(34)	(26)
Mortgages	148	206
Italian banking business	114	180
VALUE OF IN-FORCE NON-COVERED BUSINESS	825	1,125

The value of the in-force asset management business has increased compared to the previous year due primarily to the contribution of the new business and to the increase of the assets under management.

The increase in the value of banking business is mainly due to increases in projected returns, as well as an increase in new business volumes on mortgage business due to an increase in interest rate spreads.

#### 5.3 Value of new non-covered business

The value of new non-covered business has been calculated using a consistent approach to that used for covered business.

The following table shows the value of new asset management and Italian banking business in 2013.

#### Value of new non-covered business in 2013

€/m	Italy	Spain	Total
Asset management business	280	8	288
Current account business	(48)	n/a	(48)
Mortgages	74	n/a	74
Banking business	26	n/a	26
VALUE OF NEW NON-COVERED BUSINESS	306	8	314

The following table shows details of the new business margins on Italian asset management business in 2013 and 2012, calculated in a similar fashion to life business.

# New business margins in 2012 and 2013 – Italian asset management business €/m 2012 2013

-		
Value of new business at moment of sale	189	280
Regular premiums / pac	61	53
Single premiums / pic	4,219	6,286
APE	483	681
New business margin (% APE)	39.1%	41.1%
PVNBP	4,687	6,681
New business margin (% PVNBP)	4.0%	4.2%
Average annual premium multiplier	7.7	7.5

Profitability increased compared to last year primarily due to an increase in new business volumes and the change in the asset mix towards products with higher value for the company.

The margins on APE for new asset management business in Spain are approximately 41.9% in 2013.

For the banking business there has been a shift in the sales mix towards current accounts with less immediate profitability for the company, together with a strong increase in the spread on loans.

## 6. SENSITIVITY TESTS

#### 6.1 MCEV sensitivity tests

Sensitivities have been provided for both the MCEV as at December 31, 2013 and the value of 2013 new business to changes in key assumptions.

Certain of the MCEV economic sensitivities have an impact on both ANAV and VIF. For new business value, the same sensitivity tests have been applied as for the MCEV, except where a particular sensitivity is not meaningful to the assessment of the new business value.

The MCEV Principles require two-way tests to be conducted where the result of any particular test may not be symmetric. For Mediolanum's business, only the tests to the interest rate environment produce significantly different results.

Unless otherwise indicated, each the tests affects only one parameter at a time, and all other parameters are left unchanged. Management actions are maintained unchanged compared to the central run.

The following sensitivity tests have been performed, following the requirements of the MCEV Principles.

#### Interest rates and assets

• 100 basis point pa increase in the interest rate environment

This sensitivity is designed to indicate the impact of a sudden upwards parallel shift in the risk-free reference rates, which implies changes in the current market value of fixed-interest assets and in future reinvestment rates.

• 100 basis point pa decrease in the interest rate environment

This sensitivity is designed to indicate the impact of a sudden downwards parallel shift in the risk-free reference rates, which implies changes in the current market value of fixed-interest assets and in future reinvestment rates.

• 10% decrease in equity/property values at the valuation date

This sensitivity is designed to indicate the impact of a sudden change in the market-values of assets.

25% increase in equity/property implied volatilities at the valuation date

This sensitivity is designed to indicate the impact of an increase in market implied equity/property volatilities on the cost of financial options and guarantees.

• 25% increase in swaption implied volatilities at the valuation date

This sensitivity is designed to indicate the impact of an increase in market implied swaption volatilities on the cost of financial options and guarantees.

Note that in all the economic sensitivity tests the calculations have been performed assuming that the portfolio is rebalanced to maintain the current asset mix.

#### Expenses and persistency

10% decrease in maintenance expenses This sensitivity is applied to the projected level of expenses.

10% decrease in acquisition expenses.

This sensitivity is applied to the non-commission related level of acquisition expenses, for new business only.

10% proportionate decrease in lapse rates

This sensitivity reflects a downwards movement in lapse rates at all durations on all products.

#### Insurance risks

• 5% proportionate decrease in base mortality rates for life assurance business This sensitivity reflects the impact of a downwards movement in mortality rates at all ages for insurance, as opposed to annuity, business

5% proportionate decrease in mortality rates for annuity business •

This sensitivity reflects the impact of a downwards movement in mortality rates for annuity business

#### Required capital

Required capital to be equal to the level of solvency capital

In this sensitivity, the amount of required capital is set equal to the level of solvency capital at which the supervisor is empowered to take any action, namely 100% of the minimum EU solvency margin in Italy and 150% in Ireland.

The following table shows the impact of the sensitivity tests for the covered business

#### Sensitivity analysis – Covered business

Sensitivity analysis – Covered business	MCEV		Value of new business	
	€/m	%	€/m	%
Base value	1,800		31	
INTEREST RATES AND ASSETS				
1% reduction in risk-free reference rates	(69)	(3.8%)	0	(0.4%)
1% increase in risk-free reference rates	47	2.6%	(1)	(2.1%)
10% decrease in equity/property values	(89)	(5.0%)	(1)	(2.3%)
25% increase in equity/property implied volatilities	(0)	(0.0%)	0	0.0%
25% increase in swaption implied volatilities	(1)	(0.1%)	0	(0.0%)
EXPENSES AND PERSISTENCY				
10% decrease in maintenance expenses	26	1.5%	1	(4.2%)
10% decrease in acquisition expenses	-	-	1	(1.7%)
10% decrease in lapse rates	40	2.2%	2	(5.7%)

INSURANCE RISKS				
5% decrease in mortality rates for life assurance business	2	0.1%	0	(0.9%)
5% decrease in mortality rates for annuity business	(1)	(0.1%)	0	0.0%
REQUIRED CAPITAL				
Supervisory minimum solvency margin	-	0.0%	-	0.0%

### 6.2 Sensitivity tests for non-covered business

The same sensitivity tests, where relevant, have also been conducted in respect of the non-covered business and the following tables shows the results of the sensitivities on the value of in-force business and the value of new business for asset management and banking business respectively.

#### Sensitivity analysis - Asset management business

		Value of in-force business		Value of new business	
	€/m	%	€/m	%	
Base value	945		288		
INTEREST RATES AND ASSETS					
1% reduction in risk-free reference rates	(7)	(0.8%)	(2)	(0.5%)	
1% increase in risk-free reference rates	5	0.5%	2	0.7%	
10% decrease in equity/property values	(45)	(4.7%)	(11)	(4.0%)	
EXPENSES AND PERSISTENCY					
10% decrease in maintenance expenses	18	1.9%	4	1.3%	
10% decrease in acquisition expenses	-	-	3	0.9%	
10% decrease in lapse rates	33	3.5%	13	4.7%	

#### Sensitivity analysis – Banking business

		Value of in-force business		business
	€/m	%	€/m	%
Base value	181		26	
10% decrease in maintenance expenses	53	29.1%	8	29.8%
10% decrease in acquisition expenses	-	-	3	11.3%
10% decrease in lapse rates	(4)	(2.3%)	(1)	(4.8%)

## 7. METHODOLOGY

MCEV has been determined using a market-consistent framework, compliant with the MCEV Principles, which values financial risks and the deductions for the time value of options and guarantees, the cost of residual non-hedgeable risks and the frictional cost of required capital in line with the market price for risk, where observable.

MCEV consists of the sum of: free surplus allocated to the covered business, the required capital (together the Net Asset Value) and the value of in-force covered business.

Group MCEV consists of the sum of MCEV and the unadjusted IFRS net asset value for non-covered business, as required by the MCEV Principles.

Group Embedded Value represents the value of shareholders' interests in the value of the entire Group, and consists of the sum of the Group MCEV, adjustments to the IFRS net asset value allocated to non-covered business (such as marking to market other assets and liabilities, elimination of intangible assets such as goodwill), and the value of in-force asset management and banking businesses.

This section describes the methodology adopted by the Mediolanum Group in determining these items.

#### 7.1 Adjusted net assets

In accordance with the MCEV Principles, Mediolanum has allocated assets and liabilities between covered and non-covered business, using its primary IFRS accounting basis, as follows: the covered business perimeter includes all the life operating companies of the Group (Mediolanum Vita and MILL), net of the shareholding in Mediobanca, that part of the Group's goodwill associated with the acquisition of Banco Mediolanum and Gamax and related to life business, together with the component of the life segmental profits of the year which emerges in other group companies. The unadjusted Life IFRS net asset value is thus calculated in a manner consistent with the Group's overall IFRS shareholder's net equity. The remaining assets and liabilities are allocated to the non-covered business.

Adjustments are then required to the unadjusted Life IFRS net asset value, primarily to reflect the after-tax impact of (i) the elimination of goodwill, primarily that related to Banco Mediolanum and Gamax (ii) marking to market value any assets not considered on a market value under IFRS, (iii) the exclusion of the accounting items relating to unrealised gains in the life segregated funds, whose projected emergence over time is included in the value of the in-force life insurance business and the reversal of accounting items related to life insurance products classified under IAS 39 for which the value of in-force business is determined using the statutory profits.

Likewise, in Group Embedded Value, adjustments are made to the unadjusted IFRS net asset value for non-covered business in respect of: i) the elimination of goodwill, relating principally to the remaining parts of the acquisitions of Banco Mediolanunm and Gamax not allocated to covered business, and B.A. Lenz, ii) marking to market other assets not considered on a market-value basis in IFRS. We note that two years ago Mediolanum changed the methodology used in the valuation of the shareholding in Mediobanca in order to be consistent with the IFRS accounts where an independent assessment is consolidated using the net equity method.

#### Free surplus (covered business)

The free surplus is the market value of any assets allocated to, but not required to support, the in-force covered business at the valuation date. In other words, it is the market value of any assets in excess of those required to back the liabilities and the required capital.

#### Required capital (covered business)

In compliance with MCEV Principle 5, Mediolanum has made an assessment of the amount of required capital to be attributed to the covered life business. Required capital is defined as the market value of assets, attributed to the covered business over and above that required to back liabilities for covered business, whose distribution to shareholders is restricted.

Mediolanum has therefore determined the required capital as the greater of 100% (150% in Ireland) of the EU minimum solvency margin and a level of risk capital derived from a simplified internal model.

In order to derive its internal risk capital assessment, Mediolanum has adopted the following approach:

- the calculation has been performed considering Mediolanum as a single entity, taking into account the overall Life IFRS segment
- using economic capital techniques, an amount of MCEV "at risk" has been determined by applying stress tests to key parameters
- the tests use the same stresses as in the Solvency II QIS5 exercise and are therefore calibrated using a VaR measure with a 99.5% confidence level over a one year period
- the diversification effect has been taken into account within underwriting risks, market risks and between these two risk categories using the QIS5 correlation matrix; no diversification has been considered between covered and non-covered business

In practice, the regulatory minimum requirements (100% of EU minimum in Italy and 150% in Ireland) exceed those arising from the simplified internal model as described above. Total required capital for the life business as at December 31, 2013 is 213 million Euro, which corresponds to approximately 101% of the consolidated EU minimum margin.

Practice is still evolving and Mediolanum is monitoring closely developments in this area, with particular regard also to the potential impacts of the ongoing developments in calibration of the final Solvency II requirements on the levels of required capital.

#### 7.2 Value of in-force covered business

The value of in-force covered business is equal to the present value of future profits less the time value of financial options and guarantees, the frictional costs of required capital and the cost of residual non-hedgeable risks.

#### Present value of future profits

In theory, a market-consistent valuation requires each individual cash flow to be valued separately in line with its specific risk profile, so as to maintain consistency with the market prices of cash flows with similar risk profiles traded in the open markets. However, there are a number of techniques in economic theory that can be applied to reduce the complexity in such an approach, including certainty-equivalent valuation techniques. Certainty-equivalent approaches look to address the practical difficulties in valuing each individual cash flow with a different discount rate by adjusting the individual cash flows for risk, by removing the effects of asset risk premia and thus projecting risk-adjusted returns at the risk-free reference rate, which then allows the resulting stream of risk-adjusted profits to be discounted at the same risk-free reference rate. The certainty-equivalent technique is an approach commonly used in the pricing of financial instruments.

The present value of future profits is the present value of the stream of future after-tax statutory profits that are expected to be generated from all the existing policies at the valuation date, calculated using the certainty-equivalent approach, where the certainty-equivalent scenario has been set up so that all assets earn the risk-free reference rates and the discount rates are equal to the risk-free reference rate curve at the respective valuation date.

For products whose cash flows depend linearly upon market movements, or are independent of them, the certainty-equivalent approach captures all of the effects of financial risk, since there are no asymmetric impacts from varying financial conditions.

The intrinsic value of any financial options and guarantees present in the portfolio is captured directly in the certainty-equivalent projection, whereas their time value, reflecting the asymmetrical relationships with financial conditions, is reflected in the following component of value.

#### Time value of financial options and guarantees

The only material financial options and guarantees in Mediolanum's business relate to the traditional revaluable business linked to segregated funds. The main risk to shareholders is that the return on the assets in the segregated fund is insufficient to meet the financial guarantees during the period to policy maturity and, for deferred annuities, also during the annuity payout period.

During 2008 Mediolanum implemented internally a stochastic asset-liability model for its traditional business, in order to calculate both the certainty-equivalent value and the time value of financial options and guarantees. This model calculates the value of future profits by allowing for appropriate interaction between the liabilities and the corresponding assets of a given segregated fund, on the basis of a set of management rules regarding, in particular, the definition of a target return level and the approach to the realisation of gains and losses on segregated fund assets in any given scenario. The crediting strategy takes into consideration the current company practice, based on contractual and regulatory rules.

The valuation of the time value of financial options and guarantees takes into account the actual asset mix at the valuation date, and no smoothing has been allowed for in the model.

The stochastic model is calibrated to reproduce the market values of assets at the valuation date, using a set of market-consistent scenarios calibrated to the market conditions at the valuation date and, in particular, the Euro swap rate curve, swaption implied volatilities, and equity option implied volatilities. The time value of financial options and guarantees has been calculated as the difference between the average value of future profits over a set of 1,000 market-consistent scenarios and the value of future profits in the certainty-equivalent scenario.

#### Frictional cost of required capital

An allowance has been made for the frictional costs of required capital for the covered business. This cost emerges from the fact that the required capital is locked to run the business and therefore the distribution to the shareholders is restricted.

The frictional costs reflect normal taxation applied to the projected return on assets backing required capital, calculated through the projection of the after-tax risk-free reference rates on the assets backing the projected required capital, discounted to valuation date at the risk-free reference rates. As noted above, Mediolanum's required capital is equal to 100% (150% in Ireland) of the EU minimum solvency requirements as at December 31, 2013, which has been projected over the lifetime of all the business to determine the frictional cost of required capital.

No additional cost has been made for investment expenses, as the investment expenses related to managing the assets backing required capital are included within the overall life expenses, which have been projected as a part of the projected maintenance expenses in the value of in-force business.

#### Cost of residual non-hedgeable risks

The MCEV Principles indicate that sufficient allowance must be made in the valuation for the aggregate risks for in the covered business, based on the market price for risk where reliably observable.

In particular Principle 9 states that an allowance should be made for the cost of nonhedgeable risks not already allowed for in the valuation and that this allowance should include the impact of both non-hedgeable financial and non-hedgeable non-financial risks.

The hedgeable financial risks are, in fact, properly taken into account by using the market-consistent assumptions and therefore a sufficient allowance is already provided for in either the PVFP or the TVOG.

The non-hedgeable financial risks should be taken into account when market assumptions are related to a market that is not sufficiently deep and liquid or when the available reference rates are shorter than the corresponding projected liabilities. No additional costs have been allowed for in the valuation for the non-hedgeable financial risks; in fact the European swap market is considered sufficiently deep and liquid and keeping the 50 year reference rate for extra-long durations has an immaterial impact on the valuation.

Allowance for non-hedgeable non-financial risk is made through the use of best estimate assumptions, which are intended to represent the mean expectation of outcomes of the individual risk variables. Additional cost of residual non-hedgeable non-financial risks might arise due to any asymmetries in the impact of the risks on shareholder value, to risks that are not allowed for in either the PVFP or the TVOG and to the uncertainty related to the determination of the best estimate assumptions themselves.

Mediolanum has analysed its own insurance portfolio and experience in respect of nonfinancial risks, and has derived an overall allowance for residual non-hedgeable risks on a bottom-up basis taking the following approach:

- Based on sensitivity testing, it is considered that there are no material asymmetries in the impact of the non-financial risks on shareholder value, given the way that best estimate assumptions have been derived
- There is an element of reputational risk, which is not allowed for in either the PVFP or the TVOG, related to the counterparty risk in the structured bonds underlying thirdparty guarantees provided on index-linked products; based on the rating of the counterparty issuers of the structured bonds, a risk-based allowance has been made in the CNHR
- Although Mediolanum believes it has adopted an appropriate approach to the derivation of the best estimate assumptions, it is possible that the sample which has been considered in deriving the non-economic assumptions, in particular the lapse assumptions, may not be statistically exhaustive and in particular is likely not to include tail events, and so an allowance for additional risk has been made in the CNHR
- Finally a further allowance for uncertainty associated with the amount of data available for use in the derivation of all the operating assumptions and residual operational risks has been included.

As already mentioned, the internal risk capital model considers both hedgeable and nonhedgeable risks, consistent with a 99.5% confidence level over a one year time horizon. In order to express the cost of residual non-hedgeable risks as a single capital charge on a non-hedgeable risk-based capital, as required by the MCEV Principles, the same internal risk capital model has been used to determine the capital related solely to underwriting (non-financial) and operational risks.

In determining this non-hedgeable risk based capital:

- diversification benefits within the non-hedgeable risks of the covered business have been considered
- no diversification benefits between hedgeable and non-hedgeable risks or between covered and non-covered business are allowed

The non-hedgeable risk based capital has been projected over the lifetime of the portfolio according to the relevant risk drivers such as the amounts and present values of the projected reserves, premiums and expenses.

The resulting average annual cost of capital charge for residual non-hedgeable risks is approximately equal to 2.5% of the non-hedgeable risk-based capital as at December 31, 2013 and 2012.

#### 7.3 Value of in-force non-covered business

The value of in-force asset management and banking business has been calculated using a market-consistent approach which is consistent with that used for covered life

business. The non-covered businesses do not contain any material financial options and guarantees, and thus there is no time value of financial options and guarantees. As described below a simplified approach has been adopted to allow for the frictional costs of required capital for the banking business and the cost of residual non-hedgeable risks.

#### Present value of future profits

As for covered life business, the present value of future profits is the present value of the stream of future after-tax statutory profits that are expected to be generated from all the existing asset management mandates and banking products in force at the valuation date, calculated using the certainty-equivalent approach, where the certainty-equivalent scenario has been set up so that all assets earn the risk-free reference rates and the discount rates are equal to the risk-free reference rate curve at the respective valuation date. Values are reported on a look-through basis, considering all profits and losses emerging in the Group associated with the relevant line of business.

#### Allowance for non-financial risks and banking capital requirements

The approach used for non-covered business to assess the allowance for non-financial risks is consistent with that used for covered business. Allowance is made firstly through the choice of best estimate assumptions, taking into account the impact that the potential variability of the assumptions has on the level and therefore cost of capital. Although Mediolanum considers that the best estimate assumptions are appropriate in this context, it is possible that the use of best estimate assumptions may fail to capture the full impact on future shareholder profits where there is the potential for asymmetry in the results, in other words where the adverse experience has a higher impact than favourable experience; an allowance for uncertainty, due to the data used in the derivation of the operating assumptions, has been considered. Mediolanum has identified that such asymmetry and uncertainty may exist in the area of operational risks, administrative expenses, management fees and persistency.

In the first instance, the amount of capital required to meet the Basel II criteria for operational risks has been determined. Secondly, using economic capital techniques, an amount of value of in-force business "at risk" has been determined by applying stress tests on the value of in-force business to the key parameters identified, namely administrative costs, management fees and persistency. Since financial risks are already allowed for on a market-consistent basis, the resulting amount of "economic risk capital" identified separately for asset management and banking business has been subjected to a frictional cost of capital charge equal to the impact of taxation. In addition, for banking business, the present value of the opportunity costs associated with maintaining the minimum capital requirements based on risk weighted assets for mortgages and loans have been determined.

The allowances for non-financial risks and banking capital requirements have then been converted into risk margins, to be applied as an addition to the risk-free reference rates when discounting projected future profits, as shown in the following table.

#### Risk margins (additions to the reference rates) for non-covered business

	2012	2013
Asset management business	0.5%	0.6%
Banking business	3.5%	3.5%

#### 7.4 New business and Renewals

#### Definitions and new business volumes

New life business relates to new policies issued during the year including the expected renewals on those policies but excluding those resulting from the transformation of existing policies, together with discretionary increases in the level of regular premiums on existing policies. Additional lump-sums paid on existing policies are considered as new business as well.

The value of new business is the sum of the present value of future after-tax profits generated by the new premiums less the associated time value of the financial options and guarantees, the frictional cost of capital and the cost related to the non-hedgeable risks. It has been calculated at the moment of sale using both year-end economic and non economic assumptions.

New life business volumes used to calculate the value of new business in 2013 in Italy were 22 million Euro of unit-linked annualised regular premiums (of which 0.8 million Euro related to discretionary increases), 1 million of traditional annualised regular premiums, 34.6 million Euro of gross premiums invested in Freedom life policies, 101.4 million Euro of unit-linked single premiums and 0.6 million Euro of traditional assurance single premiums. Section 3.3 contains a reconciliation of these volumes to the published new business statistics of the Group.

New life business in Spain comprised 118 million Euro of single premium business, virtually all of which index-linked, and regular premium unit-linked business for 11.5 million Euro.

New asset management business is defined as the sum of retail gross inflows net of internal switches within the mutual funds and in Italy totals 53 million Euro for mutual fund instalment plans and 6,286 million Euro of lump-sum investments in mutual funds.

New asset management business in Spain in 2013 comprised lump-sum investments of 57 million Euro in Spanish funds, and 14 million Euro of instalment plans and 107 million Euro of lump-sum investments in Irish mutual fund products.

New banking business comprises new current accounts in the year, for 602 million Euro, new mortgages issued for 750 million Euro, all of which were proprietary mortgages and structured bonds issued in 2013 for 384 million Euro.

#### Value of new business

The value of new business is calculated using the same methodology and assumptions as those used for in-force business. The value of new business has been determined at the moment of sale using the end-year economic and non-economic assumptions, including all acquisition-related costs.

#### 7.5 Implied discount rate

#### Implied discount rate

The MCEV Principles do not require the disclosure of an implied discount rate (IDR). However, to maintain consistency with the previous approach used to report embedded values and allow like-for-like comparisons, IDRs have been derived for each line of covered and non-covered business so as to reproduce the MCEV results when these are used as the discount rates in traditional deterministic models, which use best estimate economic assumptions, with no explicit allowance for the time value of financial options and guarantees, after the cost of solvency capital. As required by the MCEV Principles, the IDR calculation for life business is thus based on the projected distributable earnings, net of the required capital flows. Likewise, an IDR has also been calculated for new business, considering only the new production of the year.

Implied discount rates have been calculated consistently for both covered and noncovered business.

The real-world economic assumptions used in calculating the IDR are shown in section 8.3 of this document. The results are shown in Appendix 2.

## 8. ASSUMPTIONS

The following section sets out the main assumptions used in the embedded value calculations at December 31, 2013 and 2012.

#### 8.1 Market-consistent economic assumptions

The embedded value results for all lines of covered and non-covered business have been calculated using market-consistent assumptions based on economic conditions at December 31 of the respective valuation years.

Market data for interest rates and equity volatility have been taken from Bloomberg. Historic market data have been used for real estate volatilities and for correlations, since there were not sufficient market data available.

#### Reference rates

Reference rates used in the certainty-equivalent projections, and the stochastic scenarios, are calibrated to the Euro swap rates without adjustments, at each valuation date. Where unavailable, rates at intermediate maturities were interpolated from the market data. For maturities greater than 50 years, the swap rate is extrapolated at a rate equal to the slope of the market rates between years 40 and 50. Negligible business is on the book after year 50.

The following table shows selected data.

#### Sample swap rates

	Term to Maturity						
	1	5	10	15	20	30	
December 31, 2012	0.33%	0.77%	1.57%	2.00%	2.16%	2.23%	
December 31, 2013	0.40%	1.26%	2.16%	2.59%	2.72%	2.73%	
Source: Bloomberg							

Source: Bloomberg

#### Market-consistent stochastic scenarios

Market-consistent economic scenarios have been used to calculate the value of financial option and guarantees embedded in the traditional business. Scenarios have been generated for interest rates, equity returns and property returns, based on market conditions at the respective valuation dates.

Swaption implied volatilities were based on the most recently available information, as at the valuation date. The following table show selected data for the target swaption volatilities.

#### Sample implied 10 year swaption volatility

	Term to Maturity				
	1	5	10	15	20
December 30, 2012	22.9%	22.9%	24.0%	23.5%	22.9%
December 30, 2013	30.2%	25.0%	22.5%	23.3%	23.0%
Source: Bloomberg					

A 1-factor Libor Market model (LMM) has been used to produce scenarios for interest rates while last year an extended CIR was used. Model volatility parameters are chosen so that the interest rate model fits the market swaption volatilities: since it is not possible to achieve a perfect fit over the whole surface, the fitting was restricted to the options with expiry from 3 to 25 years and maturity from 5 to 15 years.

Mediolanum's segregated portfolios contain only limited equity and property components for which returns were modelled using a time dependent volatility Black-Scholes model, where the volatility parameters were set to reflect the prices of at-the-money options with constant implied volatility. The equity component has been linked to FTSE40 (MIB) index, while the property component was proxied using the SX86P Index (since market data for property volatility was not available). The volatility values are 24.53% and 11.03% respectively (last term volatility available on Bloomberg at 31 December 2013).

In the absence of sufficient market-based information, the correlation between equities and interest rate model has not been considered.

The stochastic scenarios produced have been tested in order to check that they are arbitrage-free and that they reproduce the market prices of instruments used in the calibration process. Latin hypercube variance reduction technique was used for balanced random return generation. The time value of financial options and guarantees has been calculated using a set of 1,000 scenarios

#### Inflation

Price inflation rate has been derived from appropriate market instruments (Euro Swap inflation curve). The consumer price inflation rate shown is used to determine the projected automatic premium increases, equal to the growth in the consumer price index plus a percentage chosen by the customer (typically 3%), for products with this characteristic. Management expenses expressed as a per-policy amount are assumed to increase at the per-policy expense inflation rate.

The table below gives an indication of the implied rates used in the valuation.

#### Inflation assumptions at December, 31

	2012	2013
Consumer prices	2.15%	1.75%
Per-policy expenses	2.60%	2.25%

#### 8.2 **Operating assumptions**

The operating, or non-economic, assumptions such as demographic assumptions and expenses have been derived by Mediolanum on a best estimate approach, as defined by

the CFO Forum in the MCEV Principles, having regard to past, current and expected future experience. Assumptions are actively reviewed and annually updated if necessary.

#### Demographic assumptions

The best estimate assumptions of mortality, lapse, failure to maintain recurrent premiums and other exits have been derived from an analysis of the Mediolanum Group's recent operating results and, where appropriate, taking into consideration the experience of the relevant sectors.

Particular attention has been paid in deriving lapse assumptions for life business and a detailed analysis by type of product, policy duration and policy generation has been performed.

#### Expenses and development costs

Expense assumptions are actively reviewed and are based on the entire consolidated company costs, including depreciation and provisions, as well as all holding company, overhead and service company costs. Mediolanum has excluded 11 million Euro (after tax) of one-off costs from the expenses allocated to the lines of business in 2013.

In setting the assumptions, costs have been allocated to the separate lines of business and then allocated to the acquisition of new business and the maintenance of the in-force business activities.

No future productivity gains have been allowed for in the valuation.

#### **Commissions**

Assumed levels of future commissions and override payments to agents and salespeople were based on the Mediolanum Group's recent operating experience.

#### Tax

Projected taxable profits emerge in various tax jurisdictions, and have been subjected to normal local taxation in the country of emergence at the rates shown in the table below. Furthermore, in calculating the value in-force and new business, account has been taken of the current taxation treatment of profits projected to be remitted from Ireland to Italy (5% of dividends subject to IRES and 50% to IRAP according to the current Italian fiscal regulations).

#### **Taxation assumptions at December, 31**

	2012	2013
Italy (IRES + IRAP)	37.85%	37.85%
Ireland (corporate taxation)	12.5%	12.5%
Spain (corporate taxation)	30.0%	30.0%

#### Taxation on life reserves

Allowance has been made for the impact of the loss of interest on the advance payments of tax on mathematical reserves introduced in 2002 (L.265/2002) and subsequent modifications. Starting from the restatement as at 31 December 2008, the negative impact, relating to both the existing tax credit and projected future advance tax

payments, has been classified within the value of in-force business, as it is directly related to the development of the in-force life portfolio.

#### Participating business

For the Italian traditional revaluable business, policyholder profit participation has been assumed to continue to follow current company practice, which is consistent with the other economic and non-economic projection assumptions. There are no projected residual assets at the end of the projection period.

#### **Product charges**

Charges on life policies, management fees on mutual funds and managed accounts, and service charges on banking products were assumed to be maintained in the future at the levels prevailing at each valuation date.

#### Reserving and surrender value bases

It was assumed that no changes will be made in the principles and technical bases used to calculate technical reserves and surrender values on life policies.

#### Performance commissions

The internalisation of the models has allowed Mediolanum to handle asset management performance commission rates more precisely, while still maintaining a conservative approach, based on experience to date and for potential asymmetry. Experience variances, in the analysis of the components of embedded value earnings, have included a positive contribution of 60 million Euro in 2013 (71 million Euro in 2012), as a result of actual experience exceeding the assumptions used at the beginning of the year.

#### Reinsurance

Allowance was made for reinsurance of in-force life policies outside the Mediolanum Group, which relates mainly to various quota share financing treaties written in the years up to 1994. No new financing reinsurance arrangements have been made since 1995.

#### 8.3 Real-world economic assumptions

Best-estimate "real-world" economic assumptions are used in assessing the implied discount rate and management's expectations for the expected return on assets in excess of the risk-free reference rate in the analysis of MCEV earnings.

Bond returns are based on the market yields on Italian government instruments at different durations at the respective valuation dates. The projected total returns on equities have been assumed to yield a 3% margin over the 10-year Euro AAA government bond yield. The return on other assets was set using benchmarks consistent with the base bond yield scenario. The following table shows the main real-world economic assumptions.

#### Real-world economic assumptions at December, 31

2012	2013
4.45%	4.04%
0.85%	0.69%
	4.45%

#### Equity

4.65% 5.26%

Pre-tax rates of returns on assets backing technical reserves were set consistent with the above benchmark rates, taking into consideration the related asset mix, and the impact of unrealised capital gains/losses in segregated fund assets. Likewise, investment returns on unit-linked funds, mutual funds and managed accounts business were determined on the basis of the asset mix of each fund.

## 9. TOWERS WATSON OPINION

Towers Watson has been engaged by Mediolanum S.p.A. in relation to the disclosure of embedded value information of the Mediolanum Group for 2013 and relating in particular to the life and asset management businesses distributed in Italy and Spain and the most significant parts of the Italian banking business.

Towers Watson has worked closely with Mediolanum regarding the methodology to be adopted. Mediolanum has calculated values in respect of insurance, asset management and banking business and Towers Watson has carried out a review of these results, without however undertaking detailed checks of all underlying models, processes and calculations. Towers Watson has undertaken an overall review of the embedded values as at December 31, 2012 and 2013, together with the embedded value earnings of the Group in 2013, including the values of 2013 new business and the sensitivities shown on the embedded values and new business values.

Towers Watson has concluded that the methodology and assumptions used, together with the disclosure provided in this Supplementary Information, comply with the requirements of the European Insurance CFO Forum Market Consistent Embedded Value Principles<sup>2</sup> ("MCEV Principles"). Further, Towers Watson has concluded that the methodology and assumptions used to determine the value of in-force and new non-covered asset management and banking businesses in the Group Embedded Value results are consistent with those used for the covered business.

On the basis of its review, Towers Watson considers that the results reviewed and reported in this Supplementary Information have been determined, in all material respects, in accordance with the methodology and assumptions set out in Sections 7 and 8 of this document.

In arriving at these conclusions, Towers Watson has relied on data and information provided by Mediolanum S.p.A. and its subsidiaries. This opinion is made solely to Mediolanum S.p.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 Mediolanum S.p.A. for or in connection with its review work, the opinions it has formed, or for any statement set forth in this document.

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## **APPENDIX 1 – SEGMENTAL MCEV REPORTING**

The following tables show MCEV information broken down in line with Mediolanum's geographical segmental reporting.

MCEV as at December 31, 2013 by geographic €/m	segment Italy	Foreign	Total
free surplus	269	8	277
required capital	208	2	210
ADJUSTED NET ASSET VALUE (COVERED BUSINESS)	477	10	487
present value of future profits	1,398	54	1,452
time value of financial options and guarantees	(5)	-	(5)
frictional costs of required capital	(13)	(0)	(13)
cost of residual non-hedgeable risks	(118)	(3)	(121)
VALUE OF IN-FORCE COVERED BUSINESS	1,262	51	1,313
MARKET-CONSISTENT EMBEDDED VALUE	1,739	61	1,800

#### Movement in MCEV in 2013 by geographic segment

€/m	Italy	Foreign	Total
Opening MCEV (restated)	1,820	44	1,864
New business	20	11	31
Other elements of MCEV operating earnings	(133)	7	(126)
Economic variances	188	0	188
TOTAL MCEV EARNINGS	75	18	93
Closing adjustments (capital movements)	(156)	(1)	(157)
CLOSING MCEV	1,739	61	1,800

#### Value of new covered business in 2013 by geographical segment

€/m	Italy	Foreign	Total
Freedom life business	0	n/a	0
Other traditional life business	(1)	n/a	(1)
Unit-linked life business	21	8	29
Index-linked life business	n/a	3	3
VALUE OF NEW COVERED BUSINESS	20	11	31

### **APPENDIX 2 – IDRs**

The following table shows the implied discount rates for both in-force and new business by business line for 2013 and for comparison the 2012 values.

#### Implied discount rates by line of business

	2012	2013
In-force business		
Life	4.3%	5.2%
Asset management	5.3%	4.5%
Italian banking	5.7%	5.7%
New business		
Life	4.0%	4.8%
Asset management	4.5%	4.2%
Italian banking	5.7%	5.7%

Note that for 2012, the traditional business has been excluded from the IDR calculation.