

Embedded Value 2012 Report



Cautionary statements concerning forward-looking statements

This report includes terms used by AXA for the analysis of its business operations and therefore might not be comparable with terms used by other companies; these terms are defined in the glossary provided at the end of this document.

Cautionary statements concerning European Embedded Value as a non-GAAP measure

This report includes non-GAAP financial measures. Embedded value is not based on IFRS, which are used to prepare and report AXA's financial statements and should not be viewed as a substitute for IFRS financial measures. In the attached report, the European Embedded Value is reconciled to IFRS shareholders' equity as reported in AXA's 2012 annual accounts. AXA believes the non-GAAP measure shown herein, together with the IFRS information, provides a meaningful measure for the investing public to evaluate AXA's business relative to the businesses of peers.

Key principles

The Embedded Value is an estimate of the economic value of a life insurance business, comprised of the adjusted net asset value (ANAV) and the value of the inforce business (VIF), including future profits on existing business but excluding any profits on future new business. It corresponds to the total net amount distributable to the shareholders, after sufficient allowance for the aggregated risks in the covered business, in a market-consistent environment.

From the end of 2004, AXA's methodology for Life & Savings EV has been compliant with the CFO Forum's European Embedded Value (EEV) Principles and guidance and has adopted a market-consistent approach. In particular, it:

- Provides for the cost of all significant options and guarantees (0&G) of Life & Savings businesses.
- Includes a charge for cost of capital and non-financial risks (CoC/NFR).
- Does not include the margins earned by our affiliated investment management companies reported outside the Life & Savings segment, and with that respect is not compliant with the CFO Forum EEV Guidance 9.11.

In June 2008, the CFO Forum released the new MCEV Principles©¹. Even though AXA already uses a market consistent methodology when making allowance for the aggregate risks in its Life & Savings business, AXA has remained formally under the EEV principles for its 2012 EV disclosure since the mandatory implementation date of MCEV principles has been withdrawn, reflecting the ongoing developments of insurance reporting under Solvency II and IFRS, while the CFO Forum remains committed to the value in supplementary information, including embedded value.

¹ © Stichting CFO Forum F	oundation	2008



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1. HIGHLIGHTS

1.1. KEY FIGURES

- 2012 Life & Savings European Embedded Value (EEV) was up by Euro 6.1 billion to Euro 44.2 billion, with a strong operating return of Euro 4.7 billion, and favorable investment experience of Euro 1.6 billion, reflecting higher equity markets, lower volatilities, and tighter corporate and government bonds spreads, partly offset by the impact of lower interest rates. The end of year EEV also included Euro 1.1 billion of model changes mainly related to the risk free rate definition, driven by the current expectation for Solvency II (see details on page 5 of this report), recognized as opening adjustments.
- Operating return on Life & Savings European Embedded Value (EEV) was 12% (compared to 11% in 2011) or Euro 4.7 billion compared to 4.8 billion in 2011. The increased contributions from both inforce and new business (+4pts) were partly offset by changes in future policyholder behavior assumptions for GMxB products in the US.
- Total return on Life & Savings European Embedded Value (EEV), was 16% in 2012 (compared to -6% in 2011). The higher return in 2012 reflects a favorable impact from financial markets with a positive effect from higher equity markets, lower volatilities, and tighter corporate and government bonds spreads, partly offset by the impact of lower interest rates.
- 2012 Life & Savings New Business Value (NBV) increased by 25% to Euro 1.9 billion, driven by higher volumes, improved product mix, lower expenses, and a favorable impact from lower interest rates (through the lower discounting of fixed margins) and tighter corporate and government bonds spreads, as described above. The end of year NBV also included Euro 51 million of modeling changes recognized as opening adjustments and Euro 71 million of foreign exchange impacts.
- The NBV margin increased to 31.2% (compared to 25.2% in 2011), reflecting an improved 2012 product and country mix, notably with an increasing contribution from emerging markets.
- FY12 Implied Discount Rate (IDR) decreased by 3.4pts to 7.0%, reflecting a lower gap between the current environment and illustrative investment assumptions for future periods.
- FY12 Internal Rate of Return (IRR) increased by 1pt to 12.5%, reflecting an improved product and country mix with an increased contribution from highly profitable emerging markets, partly offset by lower illustrative investment assumptions. The change in required capital methodology mentioned on page 5 and detailed in section 3.3 of this report had no significant impact on IRRs.
- FY12 Group Embedded Value ("Group EV") increased by Euro 5.8 billion to Euro 37.3 billion. It was calculated as the sum of the Life & Savings EEV and the IFRS Tangible Net Asset Value (TNAV) plus the mark-to-market of debts for the Other than Life businesses. This increase was driven by the higher Life & Savings EEV (Euro +6.1 billion), mitigated by a slight decrease in the value of other than Life businesses (Euro -0.3 billon).
- Operating return on Group EV was 19% (19% in 2011) driven by a strong operating performance in Life & Savings. Other than Life businesses underlying earnings contributed up to Euro 1.5 billion to this return.
- Total return on Group EV was 22% (-5% in 2011), with a favorable investment experience in Life & Savings, reduced by Other than Life businesses where the lower interest rates, and tighter corporate and government bonds spreads led to higher unrealized gains on fixed-income assets, more than offset by an increased fair value of external debts.



1.2. LIFE AND SAVINGS EEV

EEV movement analysis Euro million, Group share	Free surplus	Required _	ANAV +	VIF =	Life EEV 2012	Life EEV 2011
Opening Life & Savings EEV	5,048	16,008	21,056	17,098	38,154	40,476
Modeling changes and opening adj.	(593)	(407)	(1,000)	2,098	1,098	964
Adjusted opening Life & Savings EEV	4,455	15,601	20,056	19,196	39,252	41,440
Expected existing business contribution	4,332	(505)	3,827	(92)	3,735	2,906
Current year operational experience	(583)	(104)	(687)	1,344	657	456
Change in operational assumptions	-	-	-	(1,574)	(1,574)	(49)
New Business Value	(2,177)	855	(1,322)	3,250	1,928	1,444
Operating Return on Life & Savings EEV	1,572	246	1,818	2,928	4,746	4,757
Current year investment experience	630	42	672	882	1,554	(7,361)
Total return on Life & Savings EEV	2,202	288	2,489	3,810	6,299	(2,604)
Exchange rate movements impact	(247)	(241)	(488)	(383)	(870)	781
Others (incl. Life EEV of acquired business)	(16)	(36)	(52)	(42)	(94)	9
Dividends paid/received	(1,500)	-	(1,500)	-	(1,500)	(1,694)
Capital injections	1,137	-	1,137	-	1,137	221
Closing Life & Savings EEV	6,031	15,611	21,643	22,581	44,224	38,154
of which Life & Savings VIF					22,581	17,098
Certainty equivalent PVFP					28,136	22,960
Time value of O&G					(3,705)	(3,955)
CoC/NFR					(1,850)	(1,908)
Operating Return on Life & Savings EEV					12%	11%
Total Return on Life & Savings EEV					16%	-6%

Modeling changes and opening adjustments of Euro 1,098 million in 2012 mainly consisted in:

- the Euro 1,213 million impact on VIF of adjusting end of 2011 economic scenarios, for a change in the interest rate extrapolation parameters for maturities where there is insufficient liquid data available in the market (driven by the current expectation for Solvency II), and a refinement of the model generating stochastic scenarios (see section 4.1 of this report);
- a change in required capital methodology (described in section 3.3 of this report), to reflect more accurately the basis on which the business is operated, resulting mostly in the transfer of Euro 400 million required capital to free surplus. Net impact on EEV was a Euro 7 million increase in CoC/NFR;
- the reallocation of deferred tax receivables in the US and France, resulting in a transfer of Euro 661 million in the US and Euro 90 million in France from free surplus to VIF, in order to better reflect the timing of underlying cash flows, with no impact on opening EEV;
- the reallocation of hedging assets related to the Variable Annuity business in Japan, resulting in a Euro 181 million transfer from free surplus to VIF.
- remaining changes mainly reflected model refinements in different countries.

2012 operating return of 12% was higher compared to 11% in 2011. The increase was driven by significantly higher contributions from **inforce** and **new business**, partly offset by negative operational impacts. It included the following items:



- Expected existing business contribution of Euro 3,735 million is the sum of the expected contribution from existing business assuming assets earned the beginning of period reference rates (Euro 728 million) and additional earnings consistent with the illustrative investment assumptions for future periods used to calculate IDR for the prior year (Euro 3,007 million).
- The current year operational experience of Euro 657 million included the following impacts:
 - **France** (Euro 337 million), reflecting contractual fees renegotiation on the Individual Savings business, leading to higher investment margins;
 - **US** (Euro 172 million), reflecting the favorable impact of management actions implemented to suspend the ability of policyholders to add incremental contributions into legacy Accumulator products;
 - **Japan** (Euro 157 million), mainly due to the impact of a progressive decrease in the corporate tax rate from 36.2% at end of 2011 to 33.3% in 2012 and 30.8% after 2015.

Partly offset by:

- **South East Asian** entities (Euro -52 million), reflecting expenses overruns in India, China and Indonesia where part of the investments to support the new business growth are expected not to be recurrent and worsening premium holiday experience in Singapore and Indonesia.
- Changes in operational assumptions amounted to Euro -1,574 million, reflecting the following impacts:
 - Euro -1,761 million mainly reflecting the impact of adjusting for lower lapses assumptions and partial withdrawal assumptions for GMxB products in the **US** (net of resulting additional fee revenues), partially offset by expense productivity gain.
 - Euro -178 million due to **Hong Kong** reflecting less favorable lapse, withdrawals, mortality and expense assumptions driven by recent adverse experience.
 - Euro -92 million due to **Japan** reflecting an update of lapse assumptions, partly offset by improved mortality and morbidity assumptions.
 - Euro -79 million due to **Germany**, notably reflecting an unfavorable update of mortality, lapse and disability assumptions, partly offset by lower projected bonus credited to policyholders in Life business, as well as higher unit costs considered in Health business.
 - Euro -70 million due to **Belgium**, with a higher level of lapses projected, as a consequence of management actions aiming at decreasing exposure to high guaranteed rates, partly offset by the review of mortality and expenses assumptions.

Partly offset by:

- **Switzerland** (Euro 465 million), with the impact of lower lapses assumptions based on recurring positive experience, revised crediting rate assumptions for non-mandatory Group Life business, and a higher expenses margin on Group Life business.
- **France** (Euro 92 million) with the projection of a lower loss ratio for Group Protection and Health business based on recurring positive experience in the recent years, as well as a decrease in administrative expenses.

New Business Value increased by 25%, on a comparable basis, to Euro 1,928 million while the growth of the new business APE amounted to 3%, reflecting a significant improvement in profitability.

Operating Return on Life & Savings EEV of Euro 4,746 million was fairly stable compared to Euro 4,757 million in 2011, as the significantly higher inforce and new business contribution was offset by the adverse update of assumptions in the **US**.



Current year investment experience of Euro 1,554 million represented the variation in EEV due to changes in economic conditions, compared to the expected performance based on management expectations for future periods summarized in the previous year IDRs, as captured in the **expected existing business contribution** of the movement analysis.

The total impact of marked-to-market investment return on the Life & Savings EEV in 2012 is the sum of:

- Euro 3,735 million of expected existing business contribution;
- Euro 1,554 million of investment experience compared to the expected contribution leading to an aggregate impact of Euro 4.9 billion.

This marked-to-market investment return impact on EEV could be split by economic drivers as follows:

- Euro 2.7 billion due to the passage of time (unwind and time value of O&G release) and bonds income net of defaults over the cash return:
- Euro -1.2 billion due to the decrease in swap rates;
- Euro 2.1 billion reflecting equity, real estate and hedge funds performance over the cash return;
- Euro 1.1 billion impact from the reduced equity and interest rates volatilities;
- Euro 0.1 billion impact from decreased corporate credit spreads and Eurozone sovereign bonds spreads, net of liquidity premium;
- Euro 0.5 billion of other impacts, including changes in the strategic asset allocation of funds.

Total Return on Life & Savings EEV was Euro 6,299 million or 16% over the Adjusted Opening Life & Savings EEV, as a result of the impacts described above, significantly higher than -6% in 2011. In 2011, the total return had been negatively impacted by a severe deterioration of financial conditions.

Exchange rate movements' impact amounted to Euro -870 million, reflecting a depreciation of foreign currencies against the Euro.

Dividends paid/received reflected the net dividends of Euro 1,500 million paid by the Life & Savings segment to Other than Life segments in 2012.

Capital injections of Euro 1,137 million were mainly related to injections into AXA Life Europe (ALE), as well as injections to sustain the business growth in the **UK**, **Hong Kong**, **South East Asian** entities and **Central Eastern Europe** countries.

Closing Life & Savings EEV of Euro 44,224 million was comprised of the following items:

- Life & Savings required capital of Euro 15,611 million (up by Euro 397 million from 2011). Changes from 2011 included the following:
 - Euro -407 million opening adjustments, reflecting essentially the change in required capital methodology, to reflect more accurately the basis on which the business is operated (described in section 3.3 of this report),
 - Euro -505 million capital release related to the existing business,
 - Euro -105 million operational experience, mainly reflecting a decrease in the Swiss Solvency Test capital requirement over the period together with an increase in soft capital due to improved future statutory profits in **Switzerland**,
 - additional **new business** underwritten during 2012, increasing the capital needs by Euro 855 million.
 - and Euro -241 million impact of foreign currency depreciation.

The change in methodology to define the required capital operated in 2012 and described above and in section 3.3 of this report, while affecting the opening EEV required capital by Euro 0.4 billion, had no



material impact on the capital requirement movement of the year (apart from a slightly higher release of capital in **Switzerland**) in comparison with last year. The corresponding impact on the free surplus generation of the year was estimated to Euro 105 million. Impacts were insignificant on IRRs (+0.1pt) except in Switzerland (+4.6pts).

- Life & Savings free surplus of Euro 6,031 million (up by Euro 984 million). The free surplus represents the net asset value held in excess of the shareholder's equity required to support the business. While not necessary to back existing liabilities or capital requirements, and sometimes artificially decreased by modeled capital requirements not always in line with the way the business is effectively managed despite the change in required capital operating in 2012, this excess may not be immediately distributable to shareholders, because of, for example (but not limited to):
 - dividend distribution rules including other components than statutory earnings, or implicit items in excess of hard capital but not yet realized (e.g. most of unrealized invested assets gains and losses). Total unrealized gains and losses not projected in Value of Inforce (VIF) end of 2012 amounted to Euro 2.9 billion, located mainly in **France** (Euro 1.1 billion), **Asia-Pacific region** (Euro 1.6 billion), **NORCEE** (Euro 0.7 billion).

In addition, free surplus, as a component of ANAV (the portion representing what is higher and above local required hard capital), may reflect impacts in statutory earning (e.g. statutory reserves strengthening) driven by regulatory purposes but which will often revert over time (therefore offset in VIF in such cases), unless corrected at the level of changes in assumptions. In such instances, they may represent limitations in terms of dividend payment for a given year (except in the US where upstreamed dividend are not a direct function of statutory earnings only) but will be compensated over time.

The free surplus variation included the following significant movements:

- **opening** adjustments of Euro -593 million, as the decrease in capital requirement triggered by the change in methodology was more than offset by the reallocation of tax receivables from ANAV to the VIF in the **US** (Euro 661 million)
- **operating** movements over the period of Euro +3 749 million:
 - a strong expected existing business contribution of Euro 4,332 million, reflecting the expected statutory earnings generated by the inforce business together with the capital expected to be released,
 - partly reduced by adverse operational experience of Euro -583 million, reflecting:
 - an increase in statutory reserves, i) in the US due to revised policyholder behavioral assumptions for Variable Annuity products and ii) in Hong Kong due to an adverse update of mortality assumptions, and iii) a decrease in deferred tax asset in Japan (all of them reversed in VIF)
 - a decrease in required capital and a corresponding increase in free surplus (Euro +105 million) over the period in **Switzerland**, following a decrease of Swiss Solvency Test capital requirement together with an increase in soft capital due to improved future statutory profits,
 - **new business** investments of Euro 2,177 million including both the statutory earnings impact (or "strain") and the additional required capital to support the new contracts.
- a favorable investment experience of Euro 630 million, with higher unrealized gains following the lower interest rates and tighter spreads,
- Euro -247 million impact of foreign currency depreciation,
- Euro -1,500 million dividends paid by the Life & Savings segment, described above.
- Euro 1,137 million of capital injections, as described above,



- Life & Savings VIF of Euro 22,581 million (up by Euro 5,484 million). The increase could be explained by the following movements:
 - Euro 2,098 million of opening adjustments, mainly reflecting the adjustment of end of 2011 economic scenarios (as described in section 4.1 of this report), and the reallocation of tax receivables from the ANAV in the **US**.
 - Euro 1,344 million operational experience, mainly driven by the US with the benefits from actions taken to reduce incremental contributions into legacy GMxB products, France with higher financial margins on Savings business notably from contractual fees modification, Japan with the positive impact of a decreased corporate tax rate, and Hong Kong with the counterpart of the increase in statutory reserves due to higher mortality assumptions,
 - Euro 3,250 million due to the additional contribution from new business contracts.
 - Euro 882 million favorable investment experience, driven by tighter corporate and government bonds spreads, lower volatilities, and higher equity market, partly offset by lower interest rates. Investment experience on VIF was positive for all countries except **Japan** and **Switzerland** due to the particularly low interest rates.

These positive impacts were partly reduced by

- Euro -1,574 million largely driven by the impact of adjusting for lower lapses assumptions and partial withdrawal assumptions for GMxB products in the **US**,
- and Euro -383 million impact of foreign currency depreciation.
- Certainty Equivalent PVFP increased by Euro 5,176 million to Euro 28,136 million, in line with the increase in VIF.
- The Time Value of O&G slightly decreased by Euro 250 million to Euro -3,705 million, primarily driven by the decrease in volatilities and corporate bonds spreads and by the change in interest rate diffusion model.
- CoC/NFR remained fairly stable at Euro 1,850 million.

RECONCILIATION OF LIFE & SAVINGS IFRS SHAREHOLDERS' EQUITY TO ANAV

Euro million, Group share	2011	2012
Life & IFRS Savings Shareholders' equity	42,272	45,449
Net URCG not included in Shareholders' equity	1,337	1,031
Goodwill	(6,772)	(6,481)
Deferred Acquisition & Origination Costs (DAC & DOC)	(10,611)	(8,733)
Value of Business Inforce (VBI)	(2,249)	(1,999)
Other intangibles	(796)	(703)
UCG projected in PVFP	(2,684)	(6,247)
other Stat-GAAP adjustments	559	(675)
Life & Savings Adjusted Net Asset Value (ANAV)	21,056	21,643

The table above shows the reconciliation of Life & Savings IFRS Shareholders' Equity to Life & Savings Shareholders' ANAV. The major elements of the reconciliation are as follows:

 Addition of unrealized capital gains (or losses) net of taxes and policyholder bonuses to the extent these are not reflected in IFRS equity (for example real estate and loan assets not carried at market value).



- Elimination of all intangible assets.
- Deduction of unrealized gains/losses that are counted as part of the VIF.
- Other adjustments between Statutory and IFRS balance sheet, predominantly reflecting different reserving bases. The difference compared to 2011 was mainly due to the reallocation of deferred tax receivables to VIF in the US and France, and a transfer of hedging assets related to Variable Annuity products from ANAV to VIF in Japan.

VIF RISK-NEUTRAL MATURITY PROFILE

The table below shows how the modeled discounted risk-neutral cashflows to be generated by the year-end existing business are expected to emerge into free surplus over future years. To show the profile of the VIF emergence, the VIF has been split into five maturity ranges representing time span in which profits are expected to flow.

Total VIF Profile Euro million, Group share		
1 to 5 years	7,208	32%
6 to 10 years	3,900	17%
11 to 15 years	3,415	15%
16 to 20 years	2,672	12%
more than 20 years	5,385	24%
Total	22,581	100%

Note that such projections **do not represent** a view of future free cash flows available for distribution to shareholders which would be based on illustrative investment assumptions rather than risk-neutral cash flows.

The 2012 expected free cash flows amounted to Euro 2,155 million (as shown in the EEV movement analysis presented on page 5 in the ANAV dedicated column) versus Euro 1,750 million in 2011. Projections of future free cash flows for years beyond 2012 are disclosed by the management as additional information, supplementary to this EEV report. The change in capital requirement methodology recognized in opening balances and described in section 3.3 of this report had no material impact on the required capital movements of the year and therefore on the free surplus generation of the year.

The VIF risk-neutral maturity profile presented above shows that 32% of the VIF should emerge in the first five years and 48% during the first 10 years.

IMPLIED RISK DISCOUNT RATE FOR LIFE & SAVINGS VIF

The **reference rate** reflects the average yield used for the certainty equivalent valuation, estimated over the whole projection. It decreased in 2012, reflecting the lower interest rates environment.

In-Force Implied Discount Rate 2	011	2012
Reference rate 2	.8%	2.3%
Total IDR Based on distributable earnings 10	.4%	7.0%

IDR decreased by 3.6pts to 7.0%, driven by lower illustrative investment assumptions, reduced time value of 0&Gs and lower reference rate. The decrease in IDR reflects a lower gap between market consistent world and the illustrative real world investment assumptions, in line with the ongoing recovery. 2012 IDR were at 2010 level.

2012 IDR will be the basis for calculating the 2013 expected return (excluding 2013 NBV).



1.3. LIFE AND SAVINGS NEW BUSINESS

New Business Metrics			Analysis of change in NBV		
Euro million - Group share	2011	2012	Euro Million - Groupe share		
Regular premiums	3,169	3,444	2011 Life & Savings NBV		1,444
Single premiums	25,642	27,266	Modeling changes and opening adjustmen	ts	51
Annualized Premium Equivalent (APE)	5,733	6,170	Change in scope and acquisitions		(2)
Capitalization factor	9.7	10.3	Business-driven evolution:		364
Present Value of Expected Premiums (PVEP)	56,481	62,579	Volume		109
New Business Value (NBV):	1,444	1,928	Mix		70
Certainty Equivalent Value PVFP less Strain	1,767	2,273	Expenses		67
Time Value of O&G	(212)	(239)	Investment market conditions		33
CoC/NFR	(111)	(106)	Assumptions changes and other		85
NBV/APE	25.2%	31.2%	Currency impact		71
NBV/PVEP	2.6%	3.1%	2012 Life & Savings NBV		1,928
New Business IRR	11.5%	12.5%			
APE change at comparable basis (*)		3%	NB Implied Discount Rate	2011	2012
PVEP change at comparable basis (*)		6%	Reference rate	2.7%	2.2%
NBV change at comparable basis (*) (*) comparable basis: at constant scope and FX		25%	Total IDR Based on distributable earnings	5.2%	4.5%

Life & Savings new business APE increased by 3% to Euro 6,170 million, reflecting various offsetting evolutions in the different territories. APE developments over the year are described in the 2012 Group Activity Report disclosed in the 2012 Group Annual Report – Document de Référence).

Life & Savings new business present value of expected premiums (PVEP) increased by 6% to 62,579 million, in line with the APE evolution, enhanced by the impact of lower discount rates on the present value.

Life & Savings new business value (NBV) increased by 25%, on a comparable basis, to Euro 1,928 million, mainly due to:

- a positive volume impact from Japan, Hong Kong and SEA & China, with relatively high NBV/APE margins compared to the Group level
- a more favorable product mix, driven by France reflecting more Protection and Unit-Linked products together with repricing actions, a higher share of lower guaranteed rates GMxB products in the US, and a shift from General Account Savings to Protection and Health products in MedLA,
- lower expenses with significant savings in the US,
- and a favorable impact from lower interest rates (through the lower discount of fixed margins) and tighter corporate and government bonds spreads.

The end of year **NBV** also included Euro 51 million of net favorable model changes, mainly related to the adjustment of economic scenarios described in section 4.1 of this report, and Euro 71 million foreign exchange impacts.

The internal rate of return (IRR) increased by 1.0pt to 12.5% as a result of an improved country mix reflecting the increase of sales in high growth markets versus mature (+0.6pt), a product mix improvement impact (+1.4pt) with more sales in Protection & Health and Unit-Linked versus General Account Savings



and some repricing actions, partly offset by lower illustrative investment assumptions (-0.7pt) and updated actuarial assumptions, modeling changes and expenses (-0.2pt).

IRR increased in line with the NBV margin improvement, but the increase is less significant, notably due to the cost of the discount. Indeed with the current low interest rates levels, the discount effect does not reduce long term cash flows in NBV and the decrease of interest rates impacts positively the Protection & Health business with fixed technical margins and very long term flows. On the other hand, the decrease in interest rates does not impact the IRR discounting and the long term profits do not have a material influence as all flows are discounted with the IRR (i.e. 12.5%).

New business IDR decreased to 4.5% driven by a lower reference rate and lower illustrative investment assumptions. IDR is lower for new business than for inforce, reflecting a lower level of financial guarantees for new products.

1.4. LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	44,224		1,928	
Upward parallel shift of 100 basis points in reference interest rates	2,360	5%	88	5%
Downward parallel shift of 100 basis points in reference interest rates	(5,107)	-12%	(237)	-12%
10% higher value of equity markets	1,211	3%	75	4%
10% lower value of equity markets	(1,271)	-3%	(89)	-5%
10% higher value of real estate	528	1%	4	0%
10% lower value of real estate	(532)	-1%	(17)	-1%
Overall 10% decrease in lapse rates	945	2%	140	7%
Overall and permanent decrease of 10% in expenses	1,572	4%	119	6%
5% lower mortality rate for annuity business	(381)	-1%	(10)	-1%
5% lower mortality rate for life business	831	2 %	51	3%
Upward parallel shift of 25% of the volatility on equity markets	(614)	-1%	(42)	-2%
Upward parallel shift of 25% of the volatility on interest rates	(981)	-2 %	(99)	-5%
50 basis points higher in credit spreads	(1,940)	-4%	(48)	-2%
50 basis points lower in credit spreads	2,009	5%	41	2%
Reference rate without liquidity premium	(4,316)	-10%	(104)	-5%
Reference rate with liquidity premia 10bps higher	813	2 %	20	1%

The sensitivities to interest rates movement for EEV show the classic pattern of decreases reducing value (because of contractual guarantees eroding target margins) while increases having a positive effect.

Sensitivities are applied one at a time, rather than in combination. Combined effects are likely to be different than implied by adding the effects of two separate sensitivities. The definition of these shocks is available in the Methodology section of this report.

New business often has a very different sensitivity than inforce, due to significantly different portfolios with a higher proportion of Protection products in new business. The new business will have a longer expected duration than the average of inforce for the same product type, does not include impacts on free surplus, and has small reserves built-up with lower guarantees, so sensitivities for NBV tend to be larger in percentage than for EEV.



2012 EEV sensitivities were globally in line with 2011 ones, with the following notable evolutions:

- Increase of the sensitivities to interest rates, driven by the US, as a result of the updates to
 policyholder behavior assumptions for Variable Annuity products and by Japan, Germany and
 France due to the current low interest rates leading to options and guarantees being more in the
 money.
- Increase of the sensitivities to equity markets, driven by the US with an increased separate
 account exposure, and an increased mismatch between IFRS based hedges and EEV liabilities for
 Variable Annuity products.
- Decrease of the sensitivities to volatilities, mainly driven by France, Germany, Japan and Switzerland due to a lower volatility basis.

The impact of considering a liquidity premium in the EEV calculation was Euro 4.3 billion. It strongly decreased by Euro 4.0 billon compared to 2011 due to lower level of liquidity premia observed in the markets and refinements in the interest rates extrapolation methodology in line with the draft Solvency 2 framework.

2012 NBV sensitivities were globally in line with 2011 ones, with the same notable evolutions as for the inforce:

- more sensitive to interest rates, due to a lower level of interest rates, combined with changes in product mix (notably in France) and equity markets due an increased contribution of the US NBV, more sensitive to equity markets with Variable Annuity business,
- less sensitive to interest rate and equity volatilities due to lower base volatility levels,
- less sensitive to an increase in expenses, due to lower projected expenses resulting from important expense savings in the US.



1.5. GROUP EV

Life & Savings is only one of the business segments of the AXA Group, which also has notably Property & Casualty insurance, Asset Management, Bank, International Insurance, and Holdings segments.

AXA's Group Embedded Value (Group EV) is calculated as the sum of the Life & Savings European Embedded Value (L&S EEV) for the Life & Savings segment, and the IFRS Tangible Net Asset Value (TNAV) plus the mark-to-market of debts for other businesses.

The IFRS TNAV for other businesses is derived from the IFRS shareholders equity for other than Life & Savings businesses, and several adjustments are made to obtain this tangible value, notably the elimination of intangibles assets and external debts. Reconciliation between the IFRS shareholders equity and the tangible net asset value for other than Life & Savings is available in appendix 2.

		2012		2011
Group EV - Euro million, group share	Life & Savings	Other Businesses	Total Group	Total Group
Opening Group EV	38,154	(6,606)	31,548	34,152
Modeling changes and opening adjustments	1,098	(491)	607	(293)
Adjusted opening Group EV	39,252	(7,097)	32,155	33,859
Operating return	4,746	1,524	6,269	6,345
Current year investment experience	1,554	(670)	884	(8,001)
Total return	6,299	854	7,153	(1,656)
Internal dividends payment	(1,500)	1,500	-	-
Dividend paid by the Group	-	(1,626)	(1,626)	(1,601)
Capital flows	1,137	(1,137)	-	-
Exchange rate movements impact	(870)	375	(495)	382
Acquired / Disinvested business and others	(94)	(146)	(240)	89
Change in shares issued and treasury shares	-	377	377	475
Closing Group EV	44,224	(6,900)	37,324	31,548
Operating return on Group EV	12%		19%	19%
Total return on Group EV	16%		22%	-5%

Modeling changes and opening adjustments of Euro -491 million for Other than Life businesses reflected the impact related to the purchase of Property and Casualty operations to HSBC in 2012, resulting in Euro 316 million decrease in Group EV (mainly related to the elimination of intangible assets, not accounted for in Group EV), and a correction of the allocation of shareholders' equity between segments.

Operating return of Euro 1,524 million for Other than Life business mainly included the following items:

- the underlying Earnings of Euro 1,616 million,
- a normalized capital gain assumption of 4.5% before tax on held equities, or Euro 199 million.
- and the adjustment of interest on undated subordinated debts of Euro -292 million which are considered as debt in this movement analysis.



Current year investment experience of Euro -670 million for Other than Life businesses mainly included:

- the after-tax Net Income (adjusted for cash movements related to acquisitions and disposals of the year) less Underlying Earnings and less 4.5% normalized equity capital gain assumption, netting to Euro -536 million, including notably the change in fair value of derivatives and restructuring costs,
- the change in fair value for items not reflected in IFRS net income (e.g. loans at cost in insurance companies, pension actuarial gains and losses in SoCl) of Euro 2,250 million,
- and the Euro -2,340 million impact of lower interest rates and corporate spreads on the fair value of debts, (recognized at cost in Shareholder's equity under IFRS, and as debt at fair value under the Group EV framework).

Total Return of Euro 854 million for Other than Life businesses is equal to the operating return plus the current year investment experience.

Internal dividends payment for Other than Life businesses reflected the net dividend paid by the Life & Savings entities. It is noteworthy that these dividends do not necessarily represent the cashflows received at Group Holding level.

Dividends from Property and Casualty, Asset Management, International Insurance and Banking activities paid to the Holdings segment are not shown in the table above, as neutral at the total Other than Life level.

Dividend paid by the Group for Other than Life businesses reflected the 2012 dividend paid by the Group Holding to shareholders.

Other Capital Flows for Other than Life businesses include impacts from a variety of internal transfers, resulting in 2012 in a net capital injection made to the Life & Savings segment.

Exchange rate movement impact for Other than Life businesses includes the impact of foreign currency hedges that cover the total of all businesses.

Change in shares issued and treasury shares of Euro 377 million mainly reflected 2012 employee share offering (Shareplan).



2. DETAILS BY REGION

2.1. France

LIFE AND SAVINGS EEV

EEV movement analysis <i>Euro million, Group share</i>	Free surplus	Required _ capital	ANAV +	VIF	Life EEV 2012	Life EEV 2011
Opening Life & Savings EEV	776	3,886	4,662	4,514	9,176	9,526
Modeling changes and opening adj.	97	(185)	(88)	371	283	31
Adjusted opening Life & Savings EEV	873	3,701	4,574	4,885	9,459	9,557
Expected existing business contribution	1,175	(212)	964	(289)	674	732
Current year operational experience	19	(31)	(13)	349	337	400
Change in operational assumptions	-	-	-	92	92	370
New Business Value	(595)	278	(317)	585	269	190
Operating Return on Life & Savings EEV	599	35	635	737	1,372	1,693
Current year investment experience	365	45	410	290	701	(1,471)
Total return on Life & Savings EEV	964	80	1,045	1,027	2,072	222
Exchange rate movements impact	-	-	-	-	-	0
Others (incl. Life EEV of acquired business)	(63)	-	(63)	-	(63)	-
Capital flows	(786)	-	(786)	-	(786)	(603)
Closing Life & Savings EEV	989	3,781	4,770	5,912	10,682	9,176
of which Life & Savings VIF					5,912	4,514
Certainty equivalent PVFP					7,104	6,263
Time value of O&G					(818)	(1,352)
CoC/NFR					(373)	(398)
Operating Return on Life & Savings EEV					14%	18%
Total Return on Life & Savings EEV					22%	2%

Modeling changes and opening adjustments of Euro 283 million reflected various modeling improvements and adjustments, primarily the impact of Euro 348 million adjusting end of 2011 economic scenarios (as described in the section 4.1 of this report), offset by Euro -65 million of other refinements, notably in the modeling of Group business. It also included two reallocation of components:

- the change in required capital methodology (as described in section 3.3 of this report), but with limited net impact in opening EEV, resulting in a Euro 185 million transfer from free surplus to required capital;
- and the reallocation of a deferred tax receivable from free surplus to VIF (Euro 90 million), in order to better reflect the timing of underlying cashflows emerging to VIF.



The 2012 **operating return** of 14% (+18% in 2011 which reflected higher positive impacts from changes in assumptions) included an increased **new business value**, a positive **operational experience** and favorable **operational assumptions changes**.

- The Euro 337 million **operational experience** reflected contractual fees modification on the Individual Savings business, leading to higher investment margins.
- The Euro 92 million of changes in operational assumptions included the projection of a lower loss ratio for Group Protection and Health business, based on recurring positive experience in the recent years, as well as a decrease in administrative expenses.

The **total return** of 22% was favorably impacted by the **current year investment experience** (Euro 701 million) mainly reflecting a positive impact from narrower credit and government bonds spreads, positive equity performance, and lower volatilities. Lower interest rates had a negative impact on VIF, but positive on ANAV due to an increase of unrealized gains on bonds.

The **capital flows** of Euro -786 million reflected net dividends paid in 2012.

The **EEV** of Euro 10,682 million was composed of the following elements:

- Required capital decreased by Euro 105 million to Euro 3,781 million mainly as a result of the change in capital requirement methodology at Group level affecting the opening Required Capital (see section 4.1).
- Free surplus increased by Euro 212 million to Euro 989 million, with an opening increase due to the change in capital requirement methodology described above, positive contribution from existing business, and higher unrealized gains partly mitigated by the new business investments and the dividend paid. Investment in new business only slightly increased, while new business value significantly grew.
 - The change in capital requirement methodology described above in opening balances had no material impact on the required capital movements of the year and therefore on the free surplus generation of the year. Impacts were also limited on IRRs.
- VIF increased by Euro 1,398 million to Euro 5,912 million, benefiting from the contribution of the operational performance, and investment experience.

In-Force Implied Discount Rate	2011	2012
Reference rate	3.3%	2.4%
Total IDR Based on distributable earnings	7.1%	5.4%

IDR decreased by 1.7pt to 5.4% due to lower risk free rate, lower time value of 0&G and lower risks premiums above risk free rates embedded in the illustrative investment assumptions for future periods partly offset by a decrease of the cost of capital.



LIFE AND SAVINGS NEW BUSINESS

New Business Metrics			Analysis of change in NBV		
Euro million - Group share	2011	2012	Euro Million - Groupe share		
Regular premiums	663	705	2011 Life & Savings NBV		190
Single premiums	6,779	6,736	Modeling changes and opening adjustmen	its	12
Annualized Premium Equivalent (APE)	1,340	1,378	Change in scope and acquisitions		-
Capitalization factor	9.9	11.0	Business-driven evolution:		67
Present Value of Expected Premiums (PVEP)	13,347	14,467	Volume		6
New Business Value (NBV):	190	269	Mix		40
Certainty Equivalent Value PVFP less Strain	271	328	Expenses		5
Time Value of O&G	(52)	(31)	Investment market conditions		32
CoC/NFR	(29)	(28)	Assumptions changes and other		(16)
NBV/APE	14.2%	19.5%	Currency impact		-
NBV/PVEP	1.4%	1.9%	2012 Life & Savings NBV		269
New Business IRR	8.7%	8.9%			
APE change at comparable basis (*)		3%	NB Implied Discount Rate	2011	2012
PVEP change at comparable basis (*)		8%	Reference rate	3.3%	2.4%
NBV change at comparable basis (*)		42%	Total IDR Based on distributable earnings	5.4%	4.4%

^(*) comparable basis: at constant scope and FX rate

APE increased by 3% to Euro 1,378 million, driven by higher sales of Group Protection business.

NBV increased by 42% to Euro 269 million, driven by:

- an improved product mix, reflecting a higher proportion of Protection business and Unit-Linked Savings products and lower proportion of General Account Savings, as well as some repricing actions on the Individual Savings business;
- a positive impact from financial conditions, as the lower interest rates level had a positive impact on the discount of future fixed cash flows, and the evolution of the yield curve extrapolation methodology (as described in the section 4.1 of this report);
- partly offset by unfavorable assumptions changes, reflecting lower acquisition margins on Individual Savings business and lower technical margins on Individual Protection and Health business.

This resulted in a higher NBV margin at 19.5%.

IRR slightly improved to 8.9%, as a result of improved product mix (+0.6pt) with more investment in Protection & Health and Unit-Linked business, and less in General Account Savings partly offset by lower illustrative investment assumptions (-0.4pt).

IDR decreased to 4.4% due to lower reference rate and lower time value of O&Gs. New business **IDR** is lower compared to inforce due to lower guarantees, product mix differences with new business less sensitive to investment assumptions. The gap is decreasing with lower financial guarantees in inforce business.



LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	10,682		269	
Upward parallel shift of 100 basis points in reference interest rates	114	1%	(6)	(2%)
Downward parallel shift of 100 basis points in reference interest rates	(709)	(7%)	(30)	(11%)
10% higher value of equity markets	290	3%	14	5%
10% lower value of equity markets	(312)	(3%)	(16)	(6%)
10% higher value of real estate	197	2%	6	2%
10% lower value of real estate	(219)	(2%)	(7)	(3%)
Overall 10% decrease in lapse rates	317	3%	38	14%
Overall and permanent decrease of 10% in expenses	600	6%	41	15%
5% lower mortality rate for annuity business	(53)	(0%)	(7)	(3%)
5% lower mortality rate for life business	54	1%	5	2%
Upward parallel shift of 25% of the volatility on equity markets	(149)	(1%)	(8)	(3%)
Upward parallel shift of 25% of the volatility on interest rates	(363)	(3%)	(20)	(8%)
50 basis points higher in credit spreads	(291)	(3%)	(9)	(3%)
50 basis points lower in credit spreads	284	3%	9	3%

EEV is:

- slightly positively sensitive to an increase in interest rates, as the impact of dynamic lapses options in Individual General Account Savings is more than offset by a positive impact related to guaranteed rates in Group Pension business,
- but strongly negatively sensitive to a decrease in interest rates, as the impact of guaranteed rates is not offset by dynamic lapses, due to options being out of the money.

Compared to 2011, EEV is more sensitive to interest rates due to the particularly low level of interest rates, increasing the cost of guaranteed rates together with dynamic lapses options less in the money.

Other sensitivities are globally in line with 2011 with an overall decrease due to a slightly less unfavorable economic environment, excluding the level of interest rates.

NBV sensitivities are higher than for inforce business, as only the VIF is shocked (the strain remaining unchanged) while ANAV is shocked for inforce business.

Compared to 2011, NBV sensitivity to interest rates has changed, due to the change in product mix, and dynamic lapses options being less in the money following the decrease in interest rates.



2.2. US

EEV movement analysis Euro million, Group share	Free surplus	Required =	ANAV +	VIF -	Life EEV 2012	Life EEV 2011
Opening Life & Savings EEV	1,625	3,060	4,685	363	5,048	6,795
Modeling changes and opening adj.	243	(943)	(699)	585	(114)	690
Adjusted opening Life & Savings EEV	1,868	2,118	3,986	949	4,934	7,486
Expected existing business contribution	749	(70)	679	811	1,490	848
Current year operational experience	(362)	-	(362)	534	172	1
Change in operational assumptions	-	-	-	(1,761)	(1,761)	(271)
New Business Value	(288)	120	(168)	430	262	136
Operating Return on Life & Savings EEV	99	50	149	14	163	713
Current year investment experience	(548)	24	(524)	666	142	(2,903)
Total return on Life & Savings EEV	(449)	74	(375)	680	305	(2,189)
Exchange rate movements impact	(11)	(34)	(45)	(30)	(75)	79
Others (incl. Life EEV of acquired business)	-	-	-	-	-	-
Capital flows	(315)	-	(315)	-	(315)	(327)
Closing Life & Savings EEV	1,093	2,158	3,250	1,598	4,848	5,048
of which Life & Savings VIF					1,598	363
Certainty equivalent PVFP					2,418	1,233
Time value of O&G					(486)	(685)
CoC/NFR					(334)	(184)
Operating Return on Life & Savings EEV					3%	10%
Total Return on Life & Savings EEV				_	6%	-29%

Modeling changes and opening adjustments of Euro -114 million mainly included two different reallocations of components, neutral on EEV:

- the change in capital requirement methodology described in the section 3.3 of this report, more aligned with the basis on which the business is operated, resulting in a transfer of Euro 943 million from required capital to free surplus, with no material impact on net opening EEV.
- the reallocation of deferred tax receivables, resulting in a transfer of Euro 661 million from **free surplus** to **VIF**, in order to better reflect the timing of underlying cash flows emerging into VIF.

The VIF also included various model adjustments on top of the tax receivables transfer, notably:

- Euro 272 million due to the adjustment of end of 2011 economic scenarios (as described in the Assumptions section 4.1 of the report),
- a correction on expenses modeling for GMxB products in annuitization phase, impacting the opening EEV by Euro -122 million,
- and a change in required capital projection methodology, in addition to the change in absolute levels described above impacting the opening EEV by Euro -147 million.

The 2012 operating return of 3% (+10% in 2011) included the following impacts:

• Euro 1,490 million of increased **expected existing business contribution**, driven by the high 2011 IDR, and Euro 262 million of growing **new business value**, both higher than 2011,



- Euro 172 million of operational experience mainly including the favorable impact of management actions implemented to suspend the ability to add incremental contributions into legacy Accumulators
- Euro -1,761 million of changes in **operational assumptions** which were primarily driven by updates to Variable Annuity policyholder behaviour assumptions (lower lapses and partial withdrawals) partially offset by lower unit costs triggered by expenses reduction initiatives.

The total return of 6% was favorably impacted by the current year investment experience. The impact on ANAV was negative, driven by unfavorable GMxB hedge margins, while it was positive on VIF due to higher than expected equity markets performance, lower implied volatilities, and narrowing corporate spreads, partly offset by lower interest rates.

The **capital flows** of Euro -315 million reflected dividends paid by AXA Equitable and MONY to their parent company AXA Financial Holding.

ANAV decreased by Euro 1,435 million to Euro 3,250 million, as the strong contribution from existing business net of a slightly lower new business strain (despite an increasing NBV), was more than offset by the transfer of the tax receivable to VIF in the opening EEV, statutory earnings reserves strengthening in operational experience, and GMxB hedge margins in investment experience, and dividends paid.

- Required capital decreased by Euro 903 million to Euro 2,158 million, mainly as a result of the change in capital requirement methodology at Group level affecting the opening Required Capital (see section 3.3). The required capital remained stable between the adjusted opening amount and the closing.
- Free surplus decreased by Euro 532 million to Euro 1,093 million, as the significant inforce contribution and the decrease in opening capital requirement as a result of the change in capital requirement methodology described above were partly offset by the following impacts:
 - opening transfer of the tax receivable into the VIF;
 - adverse operating impact with an increase in statutory reserves due to revised policyholder behavioral assumptions for Variable Annuity products;
 - investment experience with hedge losses;
 - dividend payment during the year;
 - investment in new business, with a slightly decreased strain despite a significant increase in **new business value**.

The change in capital requirement methodology described above had no material impact on the required capital movements of the year and therefore on the free surplus generation of the year. Impacts were also limited on IRRs.

As mentioned on page 8, the free surplus represents the net asset value held in excess of the shareholder's equity required to support the business. While not necessary to back existing liabilities or capital requirements, this excess may not be immediately distributable to shareholders because of dividend distribution rules including other components than statutory earnings. This is the case in the US, in the State of New York, where the ordinary dividend is defined as the minimum of previous year's Statutory Net Gains from Operations (based on statutory earnings components) and 10% of the previous year's Statutory Surplus (including AllianceBernstein which is excluded from the Life & Savings EEV scope).

VIF increased by Euro 1,235 million to Euro 1,598 million, benefiting from expense efficiencies, the transfer of a tax asset from the **free surplus**, and favorable net impact from market conditions partly offset by the update of policyholders behavior assumptions for GMxB products.

In 2012, all projected cash flows were recognized net of tax, with deferred tax assets generated by certain cash flows considered as recoverable, as a consequence of the redomiciliation to Arizona of the Variable Annuity reinsurance previously located in Bermuda, resulting in more efficient utilization of the deferred tax assets within a single tax group.



In-Force Implied Discount Rate	2011	2012
Reference rate	2.9%	2.9%
Total IDR Based on distributable earnings	42.2%	20.4%

The IDR strongly decreased from 42.2% to 20.4% due to a strong increase in the VIF and its components, less sensitive to economic scenarios (e.g. deferred tax receivables), lower illustrative investment assumptions for future periods and lower time value of O&Gs. The particularly high level of IDR shows that value should further increase if markets conditions return to more reasonable levels.

LIFE AND SAVINGS NEW BUSINESS

New Business Metrics			Analysis of change in NBV		
Euro million - Group share	2011	2012	Euro Million - Groupe share		
Regular premiums	363	375	2011 Life & Savings NBV		136
Single premiums	6,551	8,690	Modeling changes and opening adjustme	nts	-
Annualized Premium Equivalent (APE)	1,018	1,244	Change in scope and acquisitions		-
Capitalization factor	8.8	9.0	Business-driven evolution:		116
Present Value of Expected Premiums (PVEP)	9,749	12,048	Volume		20
New Business Value (NBV):	136	262	Mix		36
Certainty Equivalent Value PVFP less Strain	197	316	Expenses		82
Time Value of O&G	(42)	(36)	Investment market conditions		(26)
CoC/NFR	(19)	(17)	Assumptions changes and other		4
NBV/APE	13.3%	21.1%	Currency impact		10
NBV/PVEP	1.4%	2.2%	2012 Life & Savings NBV		262
New Business IRR	10.7%	13.2%			
APE change at comparable basis (*)		14%	NB Implied Discount Rate	2011	2012
PVEP change at comparable basis (*)		15 %	Reference rate	2.1%	2.4%
NBV change at comparable basis (*)		79%	Total IDR Based on distributable earnings	8.1%	7.5%

^(*) comparable basis: at constant scope and FX rate

APE increased by 14%, reflecting strong sales of Structured Capital Strategy (SCS) product, and fixed/floating GMxB products, partially offset by lower sales of Employer Sponsored and Life products. Life decrease is driven by lower sales of non Unit-Linked life products.

NBV increased by 79%, to Euro 262 million, mainly due to:

- overall higher volumes,
- improved mix with a higher share of products with lower guarantees,
- lower unit costs due to higher volume (positive expense leverage) and expense reduction initiatives.
- partly offset by investment market conditions, with lower interest rates.

This resulted in a higher **NBV margin** at 21.1% compared to 13.3% in 2011.

IRR increased by 2.6pts to 13.2%, primarily driven by a better product mix (+2.5pts) due to the new design of GMxB products with weaker guarantees, and cost efficiencies (+1.2pt,) despite lower illustrative investment assumptions (-2.1pts).

New business IDR decreased due to a lower cost of capital (driven by lower capital base) and lower illustrative investment assumptions for future periods.



LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	4,848		262	
Upward parallel shift of 100 basis points in reference interest rates	1,092	23%	3	1%
Downward parallel shift of 100 basis points in reference interest rates	(1,881)	-39%	(6)	-2%
10% higher value of equity markets	577	12%	48	18%
10% lower value of equity markets	(603)	-12%	(55)	-21%
10% higher value of real estate	6	0%	-	0%
10% lower value of real estate	(6)	0%	-	0%
Overall 10% decrease in lapse rates	(178)	-4%	10	4%
Overall and permanent decrease of 10% in expenses	352	7%	18	7%
5% lower mortality rate for annuity business	(200)	-4%	(3)	-1%
5% lower mortality rate for life business	465	10%	19	7%
Upward parallel shift of 25% of the volatility on equity markets	(209)	-4%	(10)	-4%
Upward parallel shift of 25% of the volatility on interest rates	(201)	-4%	(27)	-10%
50 basis points higher in credit spreads	(496)	-10%	(6)	-2 %
50 basis points lower in credit spreads	517	11%	5	2%
Reference rate without liquidity premium	(1,714)	-35%	(31)	-12%
Reference rate with liquidity premia 10bps higher	266	5%	5	2%

EEV became more sensitive to changes in interest rates, primarily as a result of the updates to policyholder behavior assumptions for Variable Annuity products (lower lapses and partial withdrawals), and the reduction in interest rates hedge positions.

The increase in equity sensitivities reflects the strong 2012 equity market performance and increased persistency following the Variable Annuity policyholder behaviour assumptions updates.

The impact of the 10% decrease in lapses reduced due primarily to the reduced estimate pro-rata partial withdrawal assumption, which in turn resulted in a lower absolute shock.



2.3. NORTHERN AND CENTRAL EASTERN EUROPE REGION & UK

LIFE AND SAVINGS EEV

EEV movement analysis Euro million, Group share	Free surplus	Required =	ANAV +	VIF =	Life EEV 2012	Life EEV 2011
Opening Life & Savings EEV	543	5,584	6,127	6,813	12,940	12,923
Modeling changes and opening adj.	(578)	585	7	980	987	261
Adjusted opening Life & Savings EEV	(35)	6,169	6,134	7,793	13,927	13,184
Expected existing business contribution	1,137	(88)	1,050	(224)	826	785
Current year operational experience	46	(78)	(32)	73	41	166
Change in operational assumptions	-	-	-	399	399	(87)
New Business Value	(601)	216	(385)	758	373	362
Operating Return on Life & Savings EEV	582	51	633	1,006	1,639	1,226
Current year investment experience	263	(25)	238	135	373	(1,519)
Total return on Life & Savings EEV	845	26	871	1,140	2,011	(293)
Exchange rate movements impact	15	26	42	84	126	119
Others (incl. Life EEV of acquired business)	97	(36)	61	(42)	19	16
Capital flows	654	-	654	-	654	(86)
Closing Life & Savings EEV	1,577	6,185	7,762	8,976	16,738	12,940
of which Life & Savings VIF					8,976	6,813
Certainty equivalent PVFP					11,367	8,800
Time value of O&G					(1,625)	(1,095)
CoC/NFR					(767)	(892)
Operating Return on Life & Savings EEV					12%	9%
Total Return on Life & Savings EEV					14%	-2%

Modeling changes and opening adjustments of Euro 987 million included:

- various refinements to the models in Switzerland (Euro 296 million) and Germany (Euro 197 million),
- the change in capital requirement framework resulting in a Euro 585 million increase in required capital (as described in section 3.3 of this report), with higher requirements in Switzerland, Germany, and the UK, partly compensated by lower requirements in Belgium and Central Eastern Europe. This change in capital requirement was fully offset by a decrease in free surplus, but also led to an Euro 152 million impact on VIF, due to a decrease in CoC/NFR due to a refined required capital projection methodology, in line with the new required capital basis;
- and the Euro 350 million impact of adjusting end of 2011 economic scenarios (as described in the section 4.1 of this report).

The 2012 **operating return** was 12%, compared to 9% in 2011. The increase was driven by the higher contribution from **existing business** driven by 2011 IDR, and **new business value**, together with the significant positive impact from the update of operational assumptions. It included the following contributions:



Germany had a 8% operating return, reflecting:

- Euro 30 million of operational experience due to a higher than expected technical result on the Health business.
- Euro -79 million of **operational assumption changes**, with notably an unfavorable update of mortality, lapse and disability assumptions partly offset by lower projected bonus rates in Life business, as well as higher unit costs considered in Health business.
- Euro 108 million of **new business Value**, slightly lower than 2011 at Euro 112 million driven by lower volumes of sales on traditional Life and Variable Annuity business.

• **Belgium** had a 7% **operating return**, including:

- Euro -9 million of operational experience, due to slightly higher lapses observed during the year.
- Euro -70 million of **operational assumptions changes**, reflecting a higher level of lapses considered in the future projection due to management actions aiming at decreasing exposure to high guaranteed rates, partly offset by the review of mortality and expenses assumptions.
- Euro 25 million of **new business value**, slightly higher than in 2011.

• Switzerland had a 16% operating return, due to:

- Euro 465 million of **operational assumptions changes** mainly in Group Life, reflecting lower lapse assumptions based on recurring positive experience, lower guaranteed rate for non-mandatory business, and a higher expenses margin.
- Euro 197 million of **new business value**, versus Euro 160 million in 2011.

• CEE had a 15% operating return, impacted by :

- Euro 13 million of **operational experience**, mainly reflecting a favorable lapse experience for Pension Funds in Poland and Czech Republic, partly offset by higher lapses in Life entities (Poland, Czech Republic and Hungary).
- Euro 35 million of **changes in operational assumptions**, mainly reflecting lower unit costs in the Pension Funds in Poland, as a consequence of the closure of the transfer market.
- Euro 36 million of **new business value**, slightly lower than in 2011, as a consequence of the Pension Funds reforms in Poland.

• The **UK** had a 8% operating return, impacted by :

- Euro -11 million of adverse **operational experience:** on-going investments in Wealth business growth and efficiency were partially offset by continued cost management in more established platforms, and a tax asset recognition related to prior year Sun Life Direct Protection business losses.
- Euro 47 million of **changes in operational assumptions**, notably reflecting tax changes and updated lapse assumptions.
- Euro 7 million of **new business value**, significantly lower than in 2011 because of a less favorable product mix.

The total return increased to 14%, positively impacted by financial markets evolution. Investment experience had an impact of Euro 373 million, mainly driven by the narrowing of the Belgian sovereign bonds spreads, partly offset by lower interest rates, and adverse GMxB hedge margins in the German branch of AXA Life Europe.



The Euro 654 million capital flows were due to:

- a capital injection in the German branch of AXA Life Europe, partly offset by dividend payments,
- an internal capital transfer from the P&C segment in Belgium, partly offset by a dividend paid,
- dividend received from AXA Japan in Switzerland,
- and capital injections in CEE and in the UK to invest in new business.

The EEV of Euro 16,738 million was composed of the following elements:

- Required capital increased by Euro 601 million to Euro 6,185 million, mainly driven by:
 - a more constraining capital requirement methodology (see section 3.3) in Switzerland with the use of the more constraining Swiss Solvency Test requirement, Germany and the UK, partly offset by lower requirements in Belgium and CEE, affecting the opening required capital,
 - partly offset by a decrease in the requirement over the period together with an increase in soft capital due to improved future statutory profits in **Switzerland** (Euro -105 million).
- Free surplus increased by Euro 1,034 million to Euro 1,577 million, primarily driven by the strong contribution from existing business, and capital injections partly offset by the increase in opening capital requirement following the change in methodology described above, mitigated by the decrease in the Swiss Solvency Test capital requirement over the period described above.
 - This change had no material impact on the required capital movements of the year and therefore on the free surplus generation of the year except where highlighted for Switzerland where the release in capital over the period was slightly quicker when compared with 2011 (Euro 77 million). Impacts were also limited on IRRs except in Switzerland.
- VIF increased by Euro 2,163 million to Euro 8,976 million, driven by the adjustment of economic scenarios, the additional contribution from the new business of the year, and the favorable assumptions changes in Switzerland.



EEV	move	ment	anal	vsis
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Euro million, Group share	Germany	Belgium	Switzerland	CEE	UK
2012 Opening Life & Savings EEV	3,686	1,815	5,548	840	1,050
Modeling changes and opening adj.	297	253	457	3	(23)
Adjusted opening Life & Savings EEV	3,983	2,068	6,005	843	1,028
Expected existing business contribution	241	201	300	40	44
Current year operational experience	30	(9)	17	13	(11)
Change in operational assumptions	(79)	(70)	465	35	47
New Business Value	108	25	197	36	7
Operating Return on Life & Savings EEV	300	148	978	125	87
Current year investment experience	(93)	441	(33)	58	1
Total return on Life & Savings EEV	207	589	945	182	88
Exchange rate movements impact	0	-	35	59	32
Others (incl. Life EEV of acquired business)	-	(35)	-	(13)	67
Capital flows	246	151	51	55	151
2012 Closing Life & Savings EEV	4,436	2,773	7,037	1,126	1,366
of which Life & Savings ANAV	1,135	2,067	3,715	309	536
Required capital	1,610	1,436	2,887	138	113
Free surplus	(474)	631	828	170	423
of which Life & Savings VIF	3,300	706	3,322	818	831
Certainty equivalent PVFP	4,272	1,201	4,213	840	841
Time value of O&G	(617)	(327)	(671)	(9)	(0)
CoC/NFR	(354)	(168)	(221)	(14)	(10)
Operating Return on Life & Savings EEV	8%	7%	16%	15%	8%
Total Return on Life & Savings EEV	5%	28%	16%	22%	9%

	Inforce Implied Discount Rate		Germany	Belgium	Switzerland	CEE	UK
	Poforoneo roto	2011	3.1%	3.4%	2.2%	3.9%	3.0%
	Reference rate 201	2012	2.6%	2.5%	2.3%	3.0%	2.5%
Ī	otal IDR Based on distributable earni	2011	5.5%	9.9%	3.9%	5.7%	5.1%
		2012	4.5%	9.4%	3.9%	4.9%	4.3%

In **Germany**, the IDR decreased by 1pt to 4.5% due to a decrease in reference rates, and lower risk margins in the illustrative investment assumptions.

The IDR slightly decreased to 9.4% in **Belgium**, mainly reflecting lower illustrative investment assumptions and a lower reference rate, partly offset by the lower cost of capital following the change in required capital methodology. Note that in Belgium, IDR is higher than in other countries, partly due to a higher time value of 0&G, but primarily due to the expected tightening of the Belgian sovereign bonds spreads in the illustrative investment assumptions.

The IDR remained stable in **Switzerland**, with lower risk margins in the illustrative investments assumptions and a lower time value of 0&G being offset by a lower cost of capital following the change in required capital target, leading to a quicker release of capital.

In **CEE**, the IDR decreased in line with the decrease in reference rates.

In the \mathbf{UK} , the IDR decreased due to a decrease in reference rates and lower risk margins in the illustrative investment assumptions.



LIFE AND SAVINGS NEW BUSINESS

New Business Metrics

Euro million - Group share	2011	2012	Germany	Belgium	Switzerland	CEE	UK
Regular premiums	1,000	945	394	101	217	113	120
Single premiums	8,240	7,294	606	730	1,570	232	4,156
Annualized Premium Equivalent (APE)	1,824	1,674	454	175	374	136	535
Capitalization factor	13.6	15.2	15.9	9.3	24.0	9.1	7.8
Present Value of Expected Premiums (PVEP)	21,843	21,670	6,872	1,674	6,765	1,266	5,092
New Business Value (NBV):	362	373	108	25	197	36	7
Certainty Equivalent Value PVFP less Strain	466	503	158	55	244	38	8
Time Value of O&G	(64)	(93)	(32)	(20)	(40)	(1)	-
CoC/NFR	(41)	(37)	(18)	(9)	(7)	(1)	(1)
NBV/APE	19.8%	22.3%	23.7%	14.6%	52.7%	26.5%	1.3%
NBV/PVEP	1.7%	1.7%	1.6%	1.5%	2.9%	2.9%	0.1%
New Business IRR	8.6%	8.4%	9.5%	8.9%	13.3%	9.8%	4.3%
APE change at comparable basis (*)		-10%	-10%	1%	-8%	-34%	-6%
PVEP change at comparable basis (*)		-3%	13%	-3%	-3%	-35%	-9%
NBV change at comparable basis (*)		2%	-4%	30%	20%	-9%	-77%

(*) comparable basis: at constant scope and FX rate

APE decreased by -10% to Euro 1,674 million, with lower sales across the region. It included the following contributions:

- **Germany** (-10%), with lower sales of Unit-Linked products mainly attributable to the curtailment of "Twinstar" Variable Annuity product, partly offset by higher volumes in Protection and Health products.
- **Belgium** (+1%), as the lower sales of Crest products was offset by the acquisition of a large Group contract and a higher production of Unit-Linked products.
- **Switzerland** (-8%), reflecting a decrease in Group contracts, as a consequence of the expected decline in full Protection schemes contracts after the exceptional growth in the previous year.
- **CEE** (-34%), due to a progressive drop in the Pension Funds business following regulatory changes in Poland and Hungary, and lower Unit-Linked sales mainly in Poland and Czech Republic as a result of the decision to stop the cooperation with brokers bringing low persistency business.
- **UK** (-6%), with lower sales individual pensions and offshore bonds due to unfavorable market conditions, mitigated by the growth of mutual funds volumes through Elevate platform.



Analysis of change in NBV

Euro Million - Groupe share	NorCEE/UK	Germany	Belgium	Switzerland	CEE	UK
2011 Life & Savings NBV	362	112	19	160	41	29
Modeling changes and opening adjustments	24	(1)	0	24	1	-
Change in scope and acquisitions	0	-	-	-	0	-
Business-driven evolution:	(17)	(3)	6	8	(4)	(24)
Volume	(40)	(6)	1	(15)	(20)	(0)
Mix	(20)	(12)	(5)	17	7	(27)
Expenses	(6)	(2)	(0)	(6)	(2)	4
Investment market conditions	29	18	15	(10)	5	1
Assumptions changes and other	20	(1)	(5)	21	6	(2)
Currency impact	5	-	-	4	(1)	2
2012 Life & Savings NBV	373	108	25	197	36	7

NBV increased by 9% to Euro 373 million, driven by increases in Switzerland and Belgium, with partial offset in other countries. The evolution could be analyzed as follows:

- Germany: down by 4% to Euro 108 million, due to:
 - a less favorable product mix impacted by the curtailment of Variable Annuities sale,
 - and lower volumes,

partly offset by

- a favorable impact from the lower interest rates on Health business, as well as lower guaranteed rates for Life products.
- Belgium: up by 30% to Euro 25 million, mainly due to:
 - Improved financial markets with a decrease of corporate and government bonds spreads, partly offset by
 - a less favorable product mix, with higher sales of less profitable Group,
 - and higher lapses assumptions for Crest products, consistently with the impact on inforce portfolio described above.
- Switzerland: up by 20% to Euro 197 million, due to:
 - a positive impact from adjusting the economic scenarios and model refinements,
 - updated lapse rates and credited rates assumptions for Group life contracts,
 - improved product mix, with a shift of sales to more profitable Protection products,

partly offset by lower volumes, and adverse impact from the lower and more volatile CHF interest rates.

- **CEE:** down by 9% to Euro 36 million, driven by a large decrease in volumes as a result of changes in Pension Funds regulations in Poland.
- **UK:** down by 77% to Euro 7 million, due to a less favorable product mix with more competitive pricing in direct business, lower volumes in bancassurance and in the more profitable Unit-Linked products.

IRR for the total region slightly decreased to 8.4%, with the following evolutions by country:



- In **Germany**, IRR increased by 1.2pt to 9.5% driven by a better product mix (+1.9pt) with the curtailment of Variable Annuities (having lower IRR compared to the rest of the business) partly offset by higher unit costs (-0.2pt) and lower illustrative investment assumptions (-0.2pt).
- In **Belgium**, IRR increased by 1pt to 8.9%, reflecting better product mix with a higher share of Unit-Linked and Protection & Health products (+0.5pt), and expense efficiencies including lower commissions (+0.6pt).
- In **Switzerland**, IRR increased by 3.9pts to 13.3%, of which +3.7pts were due to the update of the required capital basis, now based on the Swiss Solvency Test, leading to a quicker release of capital. Aside from this, the improved product mix due to the higher proportion of Protection with Savings components products (+0.6pt) and the update of lapses and non-mandatory guaranteed rate in Group Life (+0.5pt) were offset by an increase in expenses and commissions (-1pt), notably due to lower volumes.
- In **CEE**, the IRR remained stable at 9.8%.
- In **UK**, the IRR decreased by 3.4pts to 4.3%, impacted by the same factors that have affected NBV (see above).

In both Switzerland and Germany, while NBV margins reach significant level, IRRs are penalized by the long term nature of underlying businesses.

NB Implied Discount Rate		Germany	Belgium	Switzerland	CEE	UK
Reference rate	2011	3.0%	3.2%	2.0%	3.9%	3.0%
Reference rate	2012	2.7%	2.4%	2.3%	2.7%	2.4%
Total IDR Based on distributable earni	2011	4.6%	6.4%	4.0%	5.0%	5.5%
	2012	4.3%	5.9%	4.1%	4.0%	4.2%

Compared to 2011, the **IDR** remained quite stable in Germany and Switzerland. In Belgium, IDR decreased in line with the decrease in reference rates, and a lower cost of capital, partly offset by a higher time value of 0&G. In CEE, the decrease in IDR was in line with the lower reference rate. The decrease is stronger in the UK, due to lower reference rates and lower risk premiums in the illustrative investment assumptions, particularly impacting the Unit-Linked business.

Apart from Belgium, IDRs for new and inforce business are quite comparable, reflecting a certain homogeneity between inforce and new business products mix. In Belgium, new business IDR is lower than for inforce, reflecting a lower level of financial guarantees in new business products compared to inforce ones.



LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	16,738		373	
Upward parallel shift of 100 basis points in reference interest rates	495	3%	20	5%
Downward parallel shift of 100 basis points in reference interest rates	(1,006)	(6%)	(45)	(12%)
10% higher value of equity markets	195	1%	9	2%
10% lower value of equity markets	(196)	(1%)	(13)	(4%)
10% higher value of real estate	316	2%	(2)	(1%)
10% lower value of real estate	(298)	(2%)	(10)	(3%)
Overall 10% decrease in lapse rates	389	2%	40	11%
Overall and permanent decrease of 10% in expenses	370	2%	31	8%
5% lower mortality rate for annuity business	(42)	(0%)	(1)	(0%)
5% lower mortality rate for life business	81	0%	10	3%
Upward parallel shift of 25% of the volatility on equity markets	(135)	(1%)	(7)	(2%)
Upward parallel shift of 25% of the volatility on interest rates	(213)	(1%)	(27)	(7%)
50 basis points higher in credit spreads	(750)	(4%)	(28)	(7%)
50 basis points lower in credit spreads	806	5%	23	6%

2012 EEV sensitivities were globally in line with 2011 sensitivities, with slight decreases for most of them. The decrease in sensitivities to interest rates reflected a better management of the duration gap, and the decrease in sensitivities to expenses was mainly due to lower expenses in Switzerland and refinements in expense projection in Germany.

NBV sensitivities were quite in line with EEV sensitivities, the higher impacts being due to the weight of the new business strain not shocked in these sensitivities. Compared to 2011, NBV is more sensitive to interest rates due to the current low level of interest rates and to credit spreads.



2.4. ASIA-PACIFIC REGION

LIFE AND SAVINGS EEV

EEV movement analysis Euro million, Group share	Free surplus	Required capital	ANAV +	VIF -	Life EEV 2012	Life EEV 2011
Opening Life & Savings EEV	2,063	2,321	4,384	5,483	9,866	9,403
Modeling changes and opening adj.	(396)	191	(205)	230	25	214
Adjusted opening Life & Savings EEV	1,667	2,512	4,178	5,713	9,891	9,618
Expected existing business contribution	993	(29)	964	(387)	577	408
Current year operational experience	(349)	46	(303)	389	86	(103)
Change in operational assumptions	-	-	-	(296)	(296)	(63)
New Business Value	(575)	163	(413)	1,320	908	684
Operating Return on Life & Savings EEV	69	179	248	1,026	1,275	926
Current year investment experience	380	66	445	(357)	89	(878)
Total return on Life & Savings EEV	449	245	694	669	1,363	49
Exchange rate movements impact	(253)	(236)	(490)	(440)	(930)	603
Others (incl. Life EEV of acquired business)	(62)	-	(62)	-	(62)	-
Capital flows	84	-	84	-	84	(402)
Closing Life & Savings EEV	1,884	2,520	4,404	5,942	10,347	9,866
of which Life & Savings VIF					5,942	5,483
Certainty equivalent PVFP					6,879	6,559
Time value of O&G					(612)	(736)
CoC/NFR					(324)	(340)
Operating Return on Life & Savings EEV					13%	10%
Total Return on Life & Savings EEV					14%	1%

The modeling changes and opening adjustments of Euro 25 million reflected several impacts offsetting each other in the different countries of the region. It could be analyzed as follows:

- Euro -396 million decrease in **free surplus**, explained by **Japan** with higher capital requirement in the new Group methodology (Euro -187 million), and the reallocation of hedging assets from **free surplus** to **VIF** for GMxB products in **Japan** (Euro -181 million)
- Euro 191 million increase in **required capital**, mostly explained by the new capital requirement methodology in Japan (as described in section 3.3 of this report), but with limited net impact in opening EEV).
- Euro 230 million increase in VIF, driven by Japan with a refined modeling of GMxB products, and a positive impact from refining end of 2011 economic scenarios, partly offset by a negative impact from refining the lapses calibration methodology Hong Kong.

The change in opening required capital methodology had limited impact on net opening EEV.

The operating return of 13% (10% in 2011) was driven by a strong existing business contribution (Euro 577 million) driven by 2011 IDR, and new business Value (Euro 908 million), partly offset by unfavorable changes in operational assumptions of Euro -296 million. This included the following contributions:



- **Japan** had a 14% operating return including a strong **existing business** and **new business** contributions, and the following offsetting items:
 - Euro 157 million of **operational experience**, reflecting mainly the impact of a progressive decrease in the corporate tax rate from 36.2% at March end of 2012 to 33.3% at 2012 April and 30.8% after 2015;
 - Euro -92 million of **change in operational assumptions** reflecting deteriorated lapse assumptions, partly offset by improved mortality and morbidity assumptions.
- Hong Kong operating return at 9% where the increasing existing business and new business contributions were negatively impacted by:
 - Euro -19 million of **operational experience** reflecting an increase in expenses and adverse variance on mortality, morbidity and disability;
 - Euro -178 million of **assumptions changes**, reflecting less favorable lapses, withdrawals, mortality and expenses assumptions driven by recent negative experience
- SEA & China had a 22% operating return, driven by a strong new business Value, partly offset by:
 - Euro -52 million **operational experience** reflecting expenses overruns in India, China and Indonesia where part of the investments to support the new business growth are expected not to be recurrent and worsening premium holiday experience in Singapore and Indonesia,
 - Euro -26 million unfavorable **changes in operational assumptions** with revised premium holiday assumptions in line with the current experience.

EEV movement analysis

Euro million, Group share	Japan	Hong Kong	SEA & China
2012 Opening Life & Savings EEV	6,156	2,956	754
Modeling changes and opening adj.	211	(132)	(54)
Adjusted opening Life & Savings EEV	6,366	2,824	700
Expected existing business contribution	310	217	50
Current year operational experience	157	(19)	(52)
Change in operational assumptions	(92)	(178)	(26)
New Business Value	486	242	179
Operating Return on Life & Savings EEV	861	262	152
Current year investment experience	48	(12)	52
Total return on Life & Savings EEV	910	250	204
Exchange rate movements impact	(862)	(47)	(21)
Others (incl. Life EEV of acquired business)	-	(57)	(5)
Capital flows	(188)	232	39
2012 Closing Life & Savings EEV	6,226	3,203	918
of which Life & Savings ANAV	3,474	549	381
Required capital	1,616	774	130
Free surplus	1,859	(226)	251
of which Life & Savings VIF	2,752	2,654	537
Certainty equivalent PVFP	3,009	3,286	584
Time value of O&G	(104)	(472)	(36)
CoC/NFR	(153)	(160)	(11)
Operating Return on Life & Savings EEV	14%	9%	22%
Total Return on Life & Savings EEV	14%	9%	29%



The total return was 14%, with a limited investment experience impact.

The Euro 84 million capital flows reflected the payment of dividends of Euro 364 million, and capital injections in the Japanese branch of AXA Life Europe branch, and in Hong Kong, China, Singapore and India.

The **EEV** of Euro 10,347 million was comprised of the following elements:

- Required capital increased by Euro 199 million to Euro 2,520 million, as a consequence of the change in capital requirement methodology in Japan (see section 3.3) in opening balances.
- Free surplus decreased by Euro 179 million to Euro 1,884 million. The evolution could be explained by the main following movements:
 - Euro -396 million due to higher opening capital requirements following the change in methodology described in section 3.3 of this report;
 - Euro 993 million of strong expected existing business contribution;
 - Euro -349 million of adverse operational experience with a decrease in deferred tax asset in **Japan** and, statutory reserves strengthening in **Hong Kong** (mainly due to mortality assumptions) both reverted in VIF;
 - Euro -575 million of new business investments:
 - and Euro 380 million favorable investment experience, with higher unrealized gains due to lower interest rates and tighter credit spreads, partly offset by an increase in statutory reserves due to low interest rates in **Hong Kong**;

The change in capital requirement methodology described above in opening balances had no material impact on the required capital movements of the year and therefore on the free surplus generation of the year. Impacts were also limited on IRRs.

• **VIF** increased by Euro 460 million to Euro 5,942 million, with the main impact coming from the additional contribution from the new business of the year.

Inforce Implied Discount Rate		Japan	Hong Kong
Reference rate	2011	1.6%	2.6%
Reference rate	2012	1.3%	2.2%
Total IDR Based on distributable earnings	2011	6.2%	7.5%
Total IDR based on distributable earnings	2012	4.3%	6.8%

The **IDR** of **Japan** decreased compared to 2011 driven by lower illustrative investment assumptions and reference rate, partly offset by a higher cost of capital.

The **IDR** of **Hong Kong** decreased, reflecting a lower reference rate.



LIFE AND SAVINGS NEW BUSINESS

New Business Metrics

Euro million - Group share	2011	2012	Japan	Hong Kong	SEA & China
Regular premiums	961	1,246	424	392	430
Single premiums	1,582	2,227	1,743	160	324
Annualized Premium Equivalent (APE)	1,119	1,469	598	408	463
Capitalization factor	7.3	7.3	10.5	7.6	4.0
Present Value of Expected Premiums (PVEP)	8,627	11,354	6,175	3,137	2,042
New Business Value (NBV):	684	908	486	242	179
Certainty Equivalent Value PVFP less Strain	749	998	491	309	198
Time Value of O&G	(52)	(71)	-	(56)	(16)
CoC/NFR	(13)	(19)	(5)	(11)	(3)
NBV/APE	61.1%	61.8%	81.3%	59.4%	38.7%
NBV/PVEP	7.9%	8.0%	7.9%	7.7%	8.8%
New Business IRR	21.2%	19.7%	11.8%	21.9%	51.5%
APE change at comparable basis (*)		17%	17%	14%	21%
PVEP change at comparable basis (*)		20%	21%	14%	30%
NBV change at comparable basis (*)	-	18%	27%	8%	9%

(*) comparable basis: at constant scope and FX rate

APE up by 17% to Euro 1,469 million, driven by:

- +17% in **Japan** with higher sales of Variable Annuity, Protection and Health products;
- +14% in **Hong Kong**, with a growth in General Account Protection and Health sales;
- and +21% in **SEA & China**, with a significant growth of General Account Protection with Savings sales in Thailand and higher sales of General Account Protection and Health products China, reflecting the launch of the ICBC-AXA joint-venture which commenced in July 2012.

Analysis of change in NBV

Euro Million - Groupe share	Asia-Pacific	Japan	Hong Kong	SEA & China
2011 Life & Savings NBV	684	346	208	130
Modeling changes and opening adjustments	21	25	(3)	(1)
Change in scope and acquisitions	(2)	0	0	(3)
Business-driven evolution:	149	79	20	49
Volume	116	69	32	16
Mix	(8)	(25)	(4)	20
Expenses	(16)	2	(7)	(11)
Investment market conditions	(16)	(31)	9	7
Assumptions changes and other	73	64	(9)	18
Currency impact	56	36	17	3
2012 Life & Savings NBV	908	486	242	179

NBV up by 18% to Euro 908 million, as analyzed by factor in the above table:

- **Japan:** up by 27% to Euro 486 million, largely impacted by higher volumes, the decrease of the corporate tax rates and more favorable mortality assumptions, partly offset by a less profitable product mix with an increased share of Investment and Savings products (notably Variable Annuities), and lower interest rates .



- Hong Kong: up by 8% to Euro 242 million, as a consequence of higher volumes and a positive impact from lower interest rates on Protection business, partly offset by higher expenses despite higher volumes, and revised lapses assumptions.
- **SEA & China:** up 9% to Euro 179 million, with higher volumes and improved product mix notably in Singapore with the launch of a new regular premium Unit-Linked product and in Indonesia with a shift of sales to higher margin Protection and Health Products, partly offset by a higher level of expenses.

Overall, the NBV margin remained fairly stable at 61.8%.

The **new business IRR** of the region decreased by 1.5pt to **19.7%** driven by a decrease of profitability in Hong Kong and SEA & China, notably due to revised assumptions:

- In Japan, IRR remained stable at 11.8%
- In **Hong Kong**, IRR decreased by 2.5pts to 21.9%, driven by revised lapses and persistency assumptions, modeling refinements (-2.4pts) and higher expenses (-0.5pt), partly offset by an improved product mix (+0.3pt) with more Protection & Health products
- In SEA & China, IRR strongly decreased by 9.8pts to 51.5%, impacted by adverse assumptions changes (-9.9pts) particularly in Indonesia with higher premium holidays, a higher level of expenses (-4.3pts) notably due to acquisition expenses overrun in Indonesia, lower illustrative investment assumptions for future periods (-2.2pts) and a higher level of required capital (-2.2pts) partly offset by an improved product mix (+10.9pts) notably in Singapore and Thailand.

NB Implied Discount Rate		Japan	Hong Kong
Reference rate	2011	1.8%	2.3%
Reference rate	2012	1.5%	2.1%
Total IDR Based on distributable earnings	2011	3.3%	5.9%
iotai ibk baseu oli distributable eariiligs	2012	3.1%	5.2%

While **new business IDR** decreased in Japan due to a lower reference rate, the decrease in **Hong Kong** was mainly driven by lower illustrative investment assumptions.



LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	10,347		908	
Upward parallel shift of 100 basis points in reference interest rates	638	6%	74	8%
Downward parallel shift of 100 basis points in reference interest rates	(1,427)	(14%)	(154)	(17%)
10% higher value of equity markets	138	1%	3	0%
10% lower value of equity markets	(147)	(1%)	(4)	(0%)
10% higher value of real estate	4	0%	-	-
10% lower value of real estate	(4)	(0%)	-	-
Overall 10% decrease in lapse rates	375	4%	40	4%
Overall and permanent decrease of 10% in expenses	204	2%	24	3%
5% lower mortality rate for annuity business	(59)	(1%)	1	0%
5% lower mortality rate for life business	192	2%	12	1%
Upward parallel shift of 25% of the volatility on equity markets	(109)	(1%)	(16)	(2%)
Upward parallel shift of 25% of the volatility on interest rates	(158)	(2%)	(22)	(2%)
50 basis points higher in credit spreads	(344)	(3%)	(4)	(0%)
50 basis points lower in credit spreads	357	3%	3	0%

2012 EEV sensitivities were globally in line with 2011 sensitivities with a slight increase of sensitivities to interest rates, driven by Japan and Hong Kong reflecting an increased duration gap, and to credit spreads driven by Japan and Hong Kong.

NBV sensitivities were in line with EEV sensitivities. Compared to 2011, NBV is more sensitive to interest rates driven by Japan due to the current low level of interest rates.



2.5. MEDITERRANEAN AND LATIN AMERICAN REGION

LIFE AND SAVINGS EEV

EEV movement analysis Euro million, Group share	Free surplus	Required _	ANAV +	VIF -	MedLA EEV 2012	MedLA EEV 2011
Opening Life & Savings EEV	(78)	1,157	1,079	(75)	1,005	1,616
Modeling changes and opening adj.	41	(55)	(14)	(69)	(83)	(137)
Adjusted opening Life & Savings EEV	(36)	1,102	1,066	(144)	922	1,479
Expected existing business contribution	277	(107)	170	(1)	169	132
Current year operational experience	62	(40)	22	2	24	(9)
Change in operational assumptions	-	-	-	(8)	(8)	2
New Business Value	(118)	79	(39)	152	113	73
Operating Return on Life & Savings EEV	222	(69)	153	145	298	198
Current year investment experience	179	(68)	110	148	258	(593)
Total return on Life & Savings EEV	401	(137)	263	293	556	(395)
Exchange rate movements impact	2	3	5	3	9	(18)
Others (incl. Life EEV of acquired business)	12	-	12	-	12	(7)
Capital flows	0	-	0	-	0	(54)
Closing Life & Savings EEV	378	968	1,346	153	1,498	1,005
of which Life & Savings VIF					153	(75)
Certainty equivalent PVFP					368	105
Time value of O&G					(163)	(87)
CoC/NFR					(52)	(93)
Operating Return on Life & Savings EEV					32%	13%
Total Return on Life & Savings EEV					60%	-27%

The modeling changes and opening adjustments of Euro -83 million primarily reflected the impact of adjusting end of 2011 economic scenarios (as described in the section 4.1 of this report).

The 2012 **operating return** of 32% significantly increased compared to 13% in 2011, due to an increased new business contribution and higher expected existing business contribution driven by high 2011 IDR which was reflecting the large gap between last year economic environment (sovereign spreads for peripheral countries) and illustrative investment assumptions. All this is enhanced by a lower opening EEV as compared to 2011.

The **total return** of 60% benefitted from a positive **investment experience** with a tightening of the sovereign bonds spreads in Euro zone peripheral countries, as well as lower corporate spreads, with a partial offset from lower interest rates.

The EEV of Euro 1,498 million was composed of the following elements:

 Required capital decreased by 189 million to Euro 968 million, as the capital released on inforce business exceeded new business reduced capital consumption driven by less capital intensive products in line with the regional strategy.



- Free surplus increased by Euro 455 million to Euro 378 million, as a consequence of the decrease in required capital, and increased unrealized gains stemming from the lower interest rates, and tighter sovereign and corporate bond spreads.
- **VIF** increased by Euro 227 million to Euro 153 million, with an additional contribution from the new business of the year, and a positive investment experience with lower sovereign bond spreads.

In-Force Implied Discount Rate	2011	2012
Reference rate	3.0%	2.8%
Total IDR Based on distributable earnings	15.2%	13.0%

IDR decreased to 13.0% as a result of a slight tightening of the sovereign bonds spreads in Euro zone peripheral countries, decreasing the gap between the current environment and the illustrative investment assumptions for future periods. IDR still remain at a high level, reflecting that the value should continue to increase if the sovereign bonds' spreads further decrease.

LIFE AND SAVINGS NEW BUSINESS

New Business Metrics			Analysis of change in NBV		
Euro million - Group share	2011	2012	Euro Million - Groupe share		
Regular premiums	183	170	2011 Life & Savings NBV		73
Single premiums	2,491	2,319	Modeling changes and opening adjustmen	its	(6)
Annualized Premium Equivalent (APE)	432	402	Change in scope and acquisitions		0
Capitalization factor	4.5	4.2	Business-driven evolution:		46
Present Value of Expected Premiums (PVEP)	3,324	3,040	Volume		3
New Business Value (NBV):	73	113	Mix		22
Certainty Equivalent Value PVFP less Strain	85	125	Expenses		3
Time Value of 0&G	(2)	(7)	Investment market conditions		13
CoC/NFR	(10)	(5)	Assumptions changes and other		5
NBV/APE	16.8%	28.0%	Currency impact		0
NBV/PVEP	2.2%	3.7%	2012 Life & Savings NBV		113
New Business IRR	10.6%	14.4%			
APE change at comparable basis (*)		-7%	NB Implied Discount Rate	2011	2012
PVEP change at comparable basis (*)		-9%	Reference rate	3.8%	2.6%
NBV change at comparable basis (*)		55%	Total IDR Based on distributable earnings	5.5%	3.8%

 $^{(*)\} comparable\ basis:\ at\ constant\ scope\ and\ FX\ rate$

APE decreased by 7% to Euro 402 million, reflecting lower sales of General Account Savings products, especially at AXA MPS, partly offset by a significant growth of the sales of Unit-Linked products.

NBV increased by 55% to Euro 113 million, mainly due to:

- a more favorable product mix, with a shift from General Account Savings products towards Unit-Linked at AXA MPS and Pure Protection products in Spain, Italy and Portugal
- a favorable impact from lower sovereign bonds spreads,
- and improved mortality assumptions.

This resulted in a significantly higher **NBV margin** at 28.0%.



The **new business IRR** strongly increased by 3.8pts to 14.4%, as a result of an improved product mix (+5.9pts) with more Unit-Linked (strong performance of AXA MPS) and Protection products (mainly in Spain) and less General Account Savings partly offset by an increase in expenses (-2.0pts).

New business IDR decreased in line with lower reference rate and lower risk margins in the illustrative investment assumptions. IDR is much lower for new business than for inforce reflecting a lower financial risk profile in line with the product mix evolution (mainly Unit-Linked and Pure Protection).

LIFE AND SAVINGS SENSITIVITIES

Euro million, Group share	EEV		NBV	
Original amounts, full year 2012	1,498		113	
Upward parallel shift of 100 basis points in reference interest rates	20	1%	(3)	(2%)
Downward parallel shift of 100 basis points in reference interest rates	(83)	(6%)	(2)	(2%)
10% higher value of equity markets	11	1%	1	1%
10% lower value of equity markets	(13)	(1%)	(1)	(1%)
10% higher value of real estate	5	0%	0	0%
10% lower value of real estate	(5)	(0%)	(0)	(0%)
Overall 10% decrease in lapse rates	42	3%	12	10%
Overall and permanent decrease of 10% in expenses	46	3%	6	5%
5% lower mortality rate for annuity business	(28)	(2%)	(0)	(0%)
5% lower mortality rate for life business	40	3%	5	5%
Upward parallel shift of 25% of the volatility on equity markets	(12)	(1%)	(0)	(0%)
Upward parallel shift of 25% of the volatility on interest rates	(47)	(3%)	(3)	(3%)
50 basis points higher in credit spreads	(60)	(4%)	(1)	(1%)
50 basis points lower in credit spreads	45	3%	1	1%

2012 EEV sensitivities reflected the same risk profile as in 2011, with nevertheless lower sensitivity to market risks, notably interest rates and equity markets that decreased significantly.

NBV sensitivities to market risks decreased significantly compared to 2011 reflecting a material change in business-mix with a strong increase of Unit-Linked sales, notably in AXA MPS, and less General Account Savings business.



3. METHODOLOGY

3.1. COVERED BUSINESS

AXA's Life & Savings segment offers a broad range of life insurance products including retirement and health products, for both group and individuals. This segment accounted for 61%, or Euro 52 billion of AXA's consolidated IFRS gross revenues for the year ended 12/31/12.

Cash flows projected in the VIF are from the following entities, which represented 99.6 % of the total Life & Savings technical reserves and 100% of total Life & Savings revenues (smaller entities included in EEV are consolidated on the equity method in IFRS and therefore do not contribute to revenues) as of 12/31/12:

- United States
- France
- United Kingdom
- Northern and Central Eastern Europe (Germany, Belgium, Switzerland, and Central & Eastern Europe: Hungary, Czech Republic and Poland)
- Mediterranean and Latin American Region (Italy, Spain, Portugal, Greece, Turkey and Mexico)
- Japan
- Hong Kong
- Southeast Asia & China (China, Indonesia, Thailand, Philippines, India and Singapore)

Some entities are not taken into account for the VIF and NBV calculations, but have their Life & Savings business operations included in the Life ANAV. Their ANAV represented Euro 111 million, or 0.5% of the total ANAV as of 12/31/12.

3.2. VALUATION DATE

Life & Savings EEV is determined using data and assumptions as of December 31, 2012 for all covered business except Japan where consistent with the IFRS accounts, data and assumptions are at September 30, 2012. The conversion of local EEV into the reporting currency (Euro) is performed using exchange rates consistent with the IFRS accounts.

3.3. ANAV, VIF AND NBV METHODOLOGY

ANAV METHODOLOGY

The Life & Savings ANAV can be reconciled to the IFRS shareholders' equity based on the following main adjustments:

- Addition of unrealized capital gains/losses on asset classes for which the IFRS balance sheet does not reflect current market values
- Elimination of the value of intangibles (Goodwill, VBI, DAC, DOC ...), conceptually to be replaced by VIF for business inforce, thereby excluding any value for future business.
- Adjustment for differences between local regulatory and IFRS values of assets and liabilities
- Subtraction of unrealized capital gains included in the projection of future cash-flows (VIF)

AXA's IFRS Shareholders' Equity already includes the full impact of any actuarial gains or losses on employee benefit plans, so no adjustment is needed in EEV for employee benefits.



The ANAV for each operation includes the book value of any shares it holds in other AXA Group entities that are outside the Life & Savings segment, although any crossholdings within the Life & Savings segment are eliminated locally. The book value of crossholdings outside the Life & Savings segment is eliminated in the Holdings segment for Group EV purposes.

AXA has chosen to exclude the profits of its investment management companies on managed assets for Life & Savings operations from Life & Savings EEV, and with that respect is not compliant with the CFO Forum EEV Guidance 9.11. This choice is linked to the commercially sensitive nature of disclosing margins for companies that also manage third-party assets, and because AllianceBernstein units are publicly-traded. It is also noteworthy that the units of AllianceBernstein held by US Life entities in the Group are not valued at their 12/31/12 market value of Euro 1.6 billion (gross of tax) in the Life & Savings EEV; instead, these units are carried at their cost basis of Euro 0.9 billion. This treatment is consistent with other cross-shareholdings of entities within the AXA Group.

REQUIRED CAPITAL DEFINITION

Required capital represents the amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted.

In AXA's methodology required capital is set up at such level that the local solvency coverage ratio is at least 1.5 times the minimum coverage ratio required in the local solvency framework.

Starting from this capital requirement, a "hard capital" level is determined. Hard capital is the amount of capital effectively locked in the company, after allowance for funding sources other than shareholder resources (as part of future profits, unrealized capital gains, subordinated debts, reinsurance treaties, etc...), known as "soft capital", and that can support capital requirements accordingly to the local solvency framework rules. Soft capital limits the amount of shareholder's resources to be immediately locked-in. In AXA's methodology in order to assure a certain stability of locked-in capital and also to better reflect additional constraints in terms of capital management a floor is applied to hard capital. As a result, hard capital is at least equal to the amount of capital corresponding to a coverage ratio of 0.75 times the local solvency minimum coverage ratio.

The "hard capital" resulting from those two constraints is the amount of required capital that is reflected in the EEV movement analysis, and the basis on which CoC/NFR is calculated.

Compared to 2011 EEV, where the required capital had been set in reference to a AA level requirement on a standalone basis net of implicit items, this represents a change that has been reflected as an opening adjustment. The resulting opening adjustment on net EEV was not significant at Group level: the level of required capital decreased by Euro 0.4 billion to Euro 15.6 billion, with an impact of Euro -7 million on EEV, through a slight increase in CoC/NFR due to changes and refinements in required capital projection drivers offsetting the impact of lower initial required capital. The change in capital requirement methodology described above in opening balances had no material impact, in aggregate, on the required capital movements of the year and therefore on the free surplus generation of the year. Impacts were also limited on IRRs.

VIF METHODOLOGY

The Life & Savings VIF is valued in the following three step process:

- the base value is a *certainty equivalent present value for future profits (PVFP)*, which is the value of the business considered without taking credit for any future investment risk premia (which are the expected excess returns of equities, corporate bonds, etc. over the reference interest rate). This value includes the intrinsic value of the O&G but not their time value nor non-financial risks, except for Accumulator-type products where the full policyholder charges less hedging costs for guarantees are reflected here rather than a portion in Time Value of O&G
- the base value is then reduced by an allowance for the *Time Value of O&G*, which is valued in a manner consistent with the approach used in financial markets to value O&G: the net value is therefore a *risk neutral value*, it is the value of the business adjusted for all financial risks
- a final reduction is made for the CoC/NFR, which is the lock-in cost of capital and provision for other operational and insurance risks (i.e. non-financial risks)

In practical terms, the VIF is derived for most business from a 30 to 60 years projection of statutory earnings, and includes a provision for the remaining shareholder profits (non-material amount) beyond that term.



RISK NEUTRAL VALUE AND TIME VALUE OF OPTIONS AND GUARANTEES (0&G)

The 0&G valued in the EEV cover all material 0&G embedded in AXA's Life and Savings business - consistent with the requirements of the European Embedded Value Principles. The key 0&G considered are:

- the interest rate guarantees on traditional products (such as guaranteed cash values, guaranteed annuity options (GAOs), etc.)
- the profit sharing rules (bonus rates, credited interest rates, policyholder dividends, etc), which combined with guarantees can create asymmetric returns for shareholders
- the guaranteed benefits (GMDB, GMIB and similar) on Unit-Linked annuity products and no lapse guarantees² in life insurance contracts (although note that as mentioned above the hedging costs for guarantees on Accumulator-type business are reflected in the Certainty Equivalent PVFP rather than in the Time Value of O&G)
- the dynamic policyholder behavior, that is, the options (such as full or partial surrender, premium discontinuance, annuitization, etc.) that policyholders can elect at a time that disadvantages the company.

The risk neutral value includes (i.e. is net of) the required allowance for all such financial O&G. The calculation of the base certainty equivalent value of the businesses enables us to separate the Time Value of O&G from the intrinsic value:

Time Value of O&G = Risk neutral value less Certainty Equivalent PVFP

METHODOLOGY FOR CALCULATING THE RISK NEUTRAL VALUE

The risk neutral value is evaluated using a set of specific stochastic models (entirely designed for the purpose of valuation under a risk neutral framework), based on a set of economic and financial conditions, which are run over at least 1,000 economic risk neutral scenarios based on the assumptions described below. The value allows for the behavior of clients (lapses, etc.) and for some management actions (dynamic investment strategy, varying credited rate, etc.).

The economic scenarios are constructed using a proprietary economic scenario generator developed by Barrie & Hibbert, except for non-United States Variable Annuities, where an internally developed generator is used. A number of asset classes and economic assumptions are modeled stochastically. This includes equities, bond yields, credit spreads, credit defaults, property, foreign exchange and inflation.

In the aim of increasing the precision of the time value of options and guarantees calculation, and the global quality of stochastic scenarios, the interest rates diffusion model was changed to allow for negative interest rates scenarios, with the implementation of the Libor Market Model (LMM+), replacing the previous Black Karasinski Model. In addition, the interest rate and equity volatility model was changed to the Stochastic Volatility Jump Diffusion Model. The resulting opening adjustment amounted to Euro 255 million increase in EEV.

The construction of market consistent risk neutral economic scenarios requires a careful calibration to underlying market parameters to ensure that the valuation replicates the prices of market assets. Three key areas of calibration are the initial yield curves, the implied market consistent volatilities, and the correlations between asset classes and economies. The model calibration is described further under Economic Assumptions. The interest rate model considers both parallel shifts and twists to the yield curve.

METHODOLOGY FOR CALCULATING THE COC/NFR

CoC/NFR can be considered as a provision for two elements: 1) a cost of locked-in capital, and 2) an additional provision for other non-financial risks.

The cost of capital is the economic cost incurred through the payment of investment expenses and taxes on investment income of assets held in excess of the policyholder reserves. Mechanically, this can be viewed as the difference between investment earnings which are the reference rate after-tax and after investment expenses,

² No lapse guarantees' are guarantees on insurance contracts that the contract will remain inforce so long as the contract holder pays a predetermined level of premia, even if the investment performance is lower than expected and insufficient funds are present to keep the contract inforce in the absence of the guarantee.



compared to a discount rate which is the reference rate before tax and expenses. The amount of such assets is equal to the regulatory capital and is considered to be locked-in.

The non-financial risks represent the economic cost incurred through the exposure of the company to insurance and operational risks. As of today, there is no established market practice for the estimation of the non-financial risks in the EEV framework. Hence, AXA has calculated the allowance for non-financial risks by assuming a higher locked-in capital base, corresponding to a solvency coverage ratio of 1.5 times the minimum solvency coverage ratio (with allowance for the use of soft capital up to 50% of the capital requirement) required by the local regulator. The CoC/NFR was approximately Euro 1.3 billion higher than the minimum local regulatory requirements (and corresponding level of required capital in 2012 AXA Life & Savings EEV was Euro 11.0bn higher than the minimum solvency requirement).

One Hong Kong entity is the exception to this treatment: because tax is paid on premium rather than income, there would be no non-financial risk provision under this methodology. A provision has been made, applying the Group average tax rate to an estimated capital level for this entity.

3.4. New Business Value methodology

The value of new business sold during the calendar year is consistent with the methodology outlined for the VIF. The new business value will include both the initial cost (or "strain") of selling the business and the future earnings and return of capital to the shareholder.

It should also be noted that the value of the inforce includes all business as at the year-end date. This includes the business written during the year.

No value is placed on future new business sales. Inforce cash flows may include certain renewals flows from existing contracts as well as some future flexible premium receipts when consistent with pricing, commercial and ALM practices.

The assumptions for valuing the new business VIF are consistent with overall inforce VIF, and economic assumptions are set to reflect year-end conditions. Unit-linked products are a special case in NBV, with year-end conditions used for future asset returns but fund performance from point of sale to year-end based on beginning-of-year expectations in order to avoid distortion by market performance relative to potential future profitability.

New business includes new contracts written in the current year. If future flexible premia and expected renewal flows from new contracts written in the year are reasonably predictable, for example they are included in pricing the contract and/or there is stable historical experience, then they and the benefits associated with them are included in the projection of future cash flows. That is, they are included in the calculation of VIF, and to the extent they are related to contracts sold in the current year, they are part of NBV. If policy additions are the result of significant new marketing activity, and were not anticipated at the time of original contract sale, then such additions are reflected as new business. This treatment of future flexible premia and renewals is required by the EEV Principles and Guidance, but some areas of judgment remain. Due to different practices across the market, AXA looks to better align its treatment in each country with that of its peer companies.

Full consistency of scope is ensured between the computation of NBV and new business volume indicators (APE or PVEP).



3.5. OTHER DEFINITIONS (SENSITIVITIES AND IDR)

SENSITIVITIES

Sensitivities are applied one at a time, rather than in combination. Combined effects are likely to be different than implied by adding the effects from separate sensitivities.

For purposes of the NBV sensitivity, shocks to financial market conditions (such as change in reference interest rates or equity market levels) are assumed to occur after the point of sale, rather than just before the point of sale. Therefore, the NBV sensitivity gives an indication of how the VIF of the new business written during the year would have been affected by an economic shock occurring after the year-end. It also indicates what the NBV might have been if sales occurred at the same volume, mix and pricing as those in 2012 but in a new market environment.

Sensitivities do not include the impact on ANAV from employee benefits plans, and do not include South East Asia and China, where the full market consistent methodology is not applied.

Upward parallel shift of 100 basis points in reference rates simulates a sudden shock to the initial conditions. This means changes to: 1) the current market values of fixed-interest assets, with related possible changes to projected capital gains/losses and/or fee revenues, 2) future reinvestment rates for all asset classes, and 3) risk-discount rates. The change is applied to the reference rate including the liquidity premium, where applied in the base case. Inflation rates and the volatility on interest rates are not changed.

Downward parallel shift of 100 basis points in reference rates is the same as above but with a shift downward. Where the shift of 100 basis points would drop rates below 0%, they are floored at zero.

10% higher value of equity markets simulates a shock to the initial conditions just for equities. Listed equities and private equities including the impact of equity hedges should be shocked. This means changes to current market values of all these equities excluding hedge funds, with related possible changes to projected capital gains/losses and/or fee revenues.

10% lower value of equity markets same as above but a decrease.

10% higher value of real estate simulates a shock to the initial conditions just for real estate. This means changes to current market values of real estate, with related possible changes to projected capital gains/losses and/or fee revenues.

10% lower value of real estate same as above but a decrease.

The sensitivities to initial values of equity and real estate only change the initial values of assets, and so new scenarios are not needed. However, stochastic runs are needed for business subject to stochastic modeling.

Upward parallel shift of 25% of the volatility on equity markets simulates a shock to the initial conditions, representing the base volatility times 1.25 for the key duration and then apply a parallel shift for the other durations.

Upward parallel shift of 25% of the volatility on interest rates simulates a shock to the initial conditions, representing the base volatility times 1.25 for the key duration and a parallel shift for other durations.

50 basis point instantaneous increase in credit spreads is immediately applied at the valuation date and is applicable to all corporate credit asset classes and associated derivatives. This should be calibrated as a sudden shock of plus 50bps on the single A credit spread. This means changes to the current market value of credit assets, with related possible changes to projected capital gains/losses and/or fee revenues.

50 basis point instantaneous decrease in credit spreads is the same as above but a decrease.

Overall 10% decrease in the lapse rates means that base lapse rates are multiplied by 0.9. Decreased lapses can have a positive or negative effect on embedded value depending on policy design and at which duration the lapse occurs.



Overall and permanent decrease of 10% in expenses applies to all future expenses other than commission and commission-related (for example, agency manager payments that are a percentage of agent commissions) expenses and investment expenses (as they are managed separately from Life companies general expenses).

5% *lower mortality rate for annuity business* reflects the impact on annuity business profits from assuming 5% lower mortality rate. The base assumption in VIF for annuity business already reflects expected mortality improvement (note that mortality improvement hurts annuity profits).

5% lower mortality rate for life business reflects the impact on life insurance business profits from assuming 5% lower mortality rate.

Reference rate without liquidity premia reflects what would be the value if no liquidity premium had been considered in the projections.

Reference rate with liquidity premia 10bps higher reflects the impact, for economies where a liquidity premium is already considered, of using a 10bps higher liquidity premium in the projections (before considering any varying allowance by product).

IMPLIED DISCOUNT RATES

In a market consistent EEV, the value of the projected earnings, allowing for financial risks (Time Value of 0&G) and non-financial risks is the result of a stochastic valuation technique. As a consequence, the equivalent implied risk discount rate (IDR) can be derived from a bottom up assessment of the risk. It is the discount rate that would reproduce the VIF from a deterministic projection of statutory distributable earnings (profit less movement in required capital) in the illustrative investment assumptions. In no circumstances, it is an assumption used to determine the value

The IDR represents a useful measure of the risk reflected in the overall value estimate given a set of assumptions about future asset returns. The IDR will vary depending on the economic assumptions but it does not affect the market consistent value.

IDRs are disclosed on the basis of discounted distributable earnings including the impacts of required capital which is roughly comparable to the discount rates used in Traditional EV

In particular it allows comparison across countries of the components of EEV.

The total implied risk discount rate therefore reflects:

- the reference interest rate of the local economy
- a margin for financial risks
- an allowance for the Time Value of O&G
- an allowance for the cost of capital and non-financial risks.

IDR is used to determine the expected existing business contribution for the following year.

The implied risk discount rate will differ for each country, and between inforce and new business. The illustrative investment assumptions used in calculating Implied Discount Rates can be found in Appendix 1.



4. ASSUMPTIONS

4.1. FINANCIAL ASSUMPTIONS

INVESTMENT MARKET CONDITIONS

The projection of cash flows considers economic scenarios designed to reflect market conditions. Any such model necessarily has a limited number of inputs, and will not perfectly reproduce all of the current conditions. Described below are the target conditions for the modeling. The fit of the model to these defined targets is tested by assuring that €1 of initial asset value is reproduced when projected and discounted and by tests that confirm the model stays close to the targets (the models and the present values they produce are therefore called 'market consistent'). The process of refining the model so that it reproduces market conditions is referred to as 'calibration'.

Consistent with the CFO Forum MCEV Principles clarified in 2009, AXA has used since 2008, as part of its market-consistent methodology, a **reference rate** which includes, where appropriate, a premium over swap rates. This premium reflects the nature of certain types of long term insurance liabilities, which allow insurers to capture, either fully or partially, liquidity premia on credit assets such as corporate bonds.

In line with industry's research, notably in the context of Solvency II and following industry's converging practices, AXA is considering in its market-consistent methodology an allowance for a liquidity premium (varying by product) and an extrapolation of risk free rates to the Ultimate Forward Rate for long term maturities where not enough liquid data is available in the market.

The liquidity premium allowance is based on a two step approach.

- The first step consists in measuring the liquidity premium available in the markets by economy. In line with the industry research and QIS5, the liquidity premium is calibrated using the so called 50/40 formula corresponding to a liquidity premium equal to Maximum (0; 50%*(corporate spread 40bps)) where the corporate spread is measured with appropriate market indices for each economy.
- As a second step, a ratio is applied to the measure obtained in the first step to reflect the nature of the liabilities and, consequently, AXA's ability to capture the liquidity premium.

In line with market converging practices, AXA considers four buckets:

- 100% liquidity premium for Annuities in payment including assumed future conversions
- 75% liquidity premium for all General Account business with participating features or with guaranteed rates higher than current 10 year rate
- 50% liquidity premium for all other General Account business and will mainly capture Pure Protection business with annually renewal premia
- 0% liquidity premium for all Unit-Linked business including Variable Annuities

For each bucket the liquidity premium is added to the forward rate until the last liquid forward rate observable in the market.

A macroeconomic approach is used to derive the reference rate structure beyond the last available data point. This approach requires the following:

- Determination of the ultimate forward rate (UFR)
- Interpolation method between the last observable liquid forward rate and the ultimate forward rate.

The ultimate forward rate is a macroeconomic rate specified as the sum of long-term inflation and the expected real rate of interest.

The interpolation method is based on the Smith-Wilson technique with the alpha parameter, reflecting the speed of convergence, set equal to 0.6, and the maturity at which the forward rate reaches the UFR set equal to 10 years after the entry point to extrapolation, representing the last liquid maturity.

These parameters have been adjusted compared to the previous year, where the alpha parameter was set equal to 0.1 and the maturity at which the forward rate reaches the UFR was set equal to 90 years for all currencies. The change was driven by the current expectations for Solvency II. Solvency II is expected to define an active, deep, liquid and



transparent market in which the market price of assets is to be reproduced. The resulting opening adjustment amounted to Euro 958 million increase in EEV (details by region are provided in each relevant section of this report).

The following table shows all parameters considered to build the full reference yield curves for main currencies:

Currency	Liquidity premium (Bucket 100%)	Liquidity premium (Bucket 100%)	UFR (%)	Extrapolation entry point (year)
	31/12/11	31/12/12		point (year)
EUR	108 bps	46 bps	4,2%	20 (**)
GBP	132 bps	75 bps	4,2%	50
USD	90 bps	64 bps	4,2%	30
JPY (*)	0 bps	0 bps	3,2%	20
CHF	25 bps	0 bps	3,2%	15
HKD	81 bps	64 bps	4,2%	15

The following table shows the reference yield curves as of 31 December 2012 and 31 December 2011 corresponding to buckets 0% and 100%.

Bucket 0% reference yield curves:

	El	JR	US	SD	G	BP	JPY	′ (*)	CI	-lF	Н	(D
maturity	31/12/11	31/12/12	31/12/11	31/12/12	31/12/11	31/12/12	30/09/11	30/09/12	31/12/11	31/12/12	31/12/11	31/12/12
1	1.41%	0.33%	0.68%	0.33%	1.36%	0.67%	0.34%	0.30%	0.05%	0.05%	0.51%	0.39%
2	1.31%	0.38%	0.73%	0.39%	1.33%	0.71%	0.35%	0.28%	0.09%	0.07%	0.63%	0.39%
3	1.36%	0.47%	0.83%	0.48%	1.37%	0.78%	0.38%	0.28%	0.19%	0.11%	0.81%	0.45%
5	1.73%	0.77%	1.25%	0.84%	1.58%	1.03%	0.48%	0.34%	0.58%	0.34%	1.28%	0.70%
7	2.09%	1.14%	1.68%	1.30%	1.90%	1.39%	0.68%	0.48%	0.93%	0.61%	1.64%	1.02%
10	2.43%	1.61%	2.10%	1.87%	2.36%	1.93%	1.04%	0.79%	1.25%	0.98%	1.91%	1.42%
15	2.74%	2.09%	2.51%	2.49%	2.78%	2.58%	1.51%	1.28%	1.53%	1.33%	2.00%	1.71%
20	2.75%	2.26%	2.63%	2.76%	2.99%	2.94%	1.76%	1.59%	1.70%	1.72%	2.16%	2.19%
25	2.65%	2.57%	2.69%	2.90%	3.13%	3.14%	1.90%	1.87%	1.88%	2.01%	2.38%	2.58%
30	2.55%	2.83%	2.73%	2.98%	3.19%	3.23%	2.05%	2.09%	2.04%	2.21%	2.59%	2.85%

Bucket 100% reference yield curves:

	El	JR	US	SD.	G	BP	JPY	′ (*)	CI	- IF	Hk	(D
maturity	31/12/11	31/12/12	31/12/11	31/12/12	31/12/11	31/12/12	30/09/11	30/09/12	31/12/11	31/12/12	31/12/11	31/12/12
1	2.51%	0.79%	1.59%	0.97%	2.70%	1.43%	0.34%	0.30%	0.31%	0.05%	1.33%	1.04%
2	2.41%	0.84%	1.64%	1.04%	2.68%	1.47%	0.35%	0.28%	0.35%	0.07%	1.45%	1.04%
3	2.46%	0.93%	1.74%	1.13%	2.71%	1.54%	0.38%	0.28%	0.44%	0.11%	1.63%	1.10%
5	2.84%	1.24%	2.16%	1.49%	2.92%	1.79%	0.48%	0.34%	0.83%	0.34%	2.10%	1.35%
7	3.20%	1.61%	2.60%	1.95%	3.25%	2.15%	0.68%	0.48%	1.19%	0.61%	2.46%	1.68%
10	3.54%	2.08%	3.03%	2.53%	3.72%	2.70%	1.04%	0.79%	1.51%	0.98%	2.74%	2.07%
15	3.86%	2.56%	3.43%	3.16%	4.15%	3.35%	1.51%	1.28%	1.78%	1.33%	2.83%	2.37%
20	3.87%	2.74%	3.56%	3.43%	4.36%	3.72%	1.76%	1.59%	1.94%	1.72%	2.93%	2.73%
25	3.77%	2.97%	3.62%	3.56%	4.50%	3.92%	1.90%	1.87%	2.09%	2.01%	3.06%	3.02%
30	3.66%	3.17%	3.66%	3.65%	4.56%	4.01%	2.05%	2.09%	2.23%	2.21%	3.20%	3.21%

^(*) AXA Japan results are based on end of September economic assumptions in line with their IFRS accounting closing date.

^(**) The extrapolation entry point for EUR was 30 years in 2011.



The approach to setting *market consistent volatility* targets in a risk neutral calculation focuses on the implied volatility of market prices for different asset classes. These implied volatilities can be derived from pricing formulas and the observed market prices of various derivative instruments. The new diffusion models implemented in 2012 allow for the modeling of interest rates and equity volatility surfaces with a significant granularity. The tables below show the targets used for 10 year swaptions and at-the-money equity options at year 5,10, and 15 for each of the major areas

Some specific adjustments in relation to the liquidity premium allowance are made when setting the market consistent targets:

- Corporate credit spreads targets, driving the volatility of the credit component of the asset returns, are set
 consistently with the calibration of the liquidity premium; and
- Swaption implied volatility targets, used in the models, are adjusted for each liquidity premium bucket in
 order to maintain the relationship between interest rates and swaption implied volatility in line with observed
 market data.

Target volatilities		Equities			10 yr Swaptions			
2011	year 5	year 10	year 15	year 5	year 10	year 15		
USD	28.79%	31.09%	31.49%	34.42%	31.11%	31.04%		
EUR	27.30%	27.61%	27.77%	27.59%	25.47%	28.78%		
JPY (*)	24.72%	27.36%	29.74%	30.80%	27.28%	27.23%		
GBP	25.70%	27.24%	27.17%	22.29%	16.69%	14.86%		
CHF	20.94%	20.57%	n/a	38.60%	38.50%	25.19%		
HKD	27.62%	28.65%	n/a	40.00%	29.75%	29.68%		

Target volatilities		Equities		10 yr Sw aptions			
2012	year 5	year 10	year 15	year 5	year 10	year 15	
USD	23.74%	26.55%	29.71%	27.21%	23.51%	22.49%	
EUR	23.99%	24.42%	24.68%	27.20%	24.00%	24.90%	
JPY (*)	21.05%	23.62%	25.48%	26.83%	22.03%	23.60%	
GBP	22.82%	25.58%	26.99%	22.70%	16.48%	15.20%	
CHF	17.75%	18.83%	n/a	42.00%	42.60%	40.90%	
HKD	22.90%	24.50%	n/a	32.92%	38.43%	n/a	

.As in 2011, AXA used at year-end 2012 spot daily at-the-money forward volatilities for both equities and swaptions.

Correlations measure the extent to which various asset classes and economies move together over time. The correlation of equity returns, inflation, bond yields, and economies, has been set with reference to historical market data. It is not possible to estimate an "implied correlation," as there are almost no financial instruments available with sufficient liquidity from whose price one can, in an objective manner, derive market consistent implied correlations. AXA's modeling ensures that correlations between equities and 10 year bond interest rates are between 5% and 15%.

Inflation rates targets in a risk neutral calculation are based on market implied inflation. For economies where data is not available a illustrative investment assumption is considered. Inflation is mainly impacting the EEV through expenses, premiums and some benefits indexations. The table below shows the average implied inflation rates for economies where the information is available (for others please refer to appendix1).

Inflation Rate		2011	2012
	EUR	2.5%	2.4%
	USD	2.4%	2.9%
	GBP	3.5%	3.3%



ASSET MIX ASSUMPTIONS

The assumptions described above are used in local models in conjunction with the asset mix to derive the assumed projected fund volatilities, a key driver of the risk neutral values. **Asset mixes** used are shown in the table below at the country level, although generally calculations are done using the applicable asset mix at a line of business level. The asset mixes describe the intended investment strategy of each operating company rather than the position at the start of the projection.

Asset Mix (Fl/Equity/other)	2011	2012
United States	92/3/5	89/4/7
France	89/6/5	89/6/5
United Kingdom	30/60/10	62/33/5
Sw itzerland	74/5/21	78/4/17
Japan	81/7/13	79/8/13
Belgium	88/5/7	84/4/12
Hong Kong	76/16/8	68/25/7
Germany	91/2/7	90/3/6
MedLA	92/3/5	92/3/5
CEE	65/27/8	68/25/7

EXCHANGE RATES

ANAV and VIF are calculated using end of year exchange rates (like the previous year, Japan was also converted with end of year rates instead of end of September, due to a significant variation).

New business metrics as well as all the variations impacting the returns on EEV are calculated using average exchange rates over the year.

Exchange rates local	20:	11	20	12
currency vs Euro	EoY	Avg	EoY	Avg
United States	1.298	1.387	1.318	1.288
United Kingdom	0.8353	0.8663	0.8111	0.8138
Sw itzerland	1.214	1.237	1.207	1.207
Japan	99.9	110.9	114.0	102.6
Hong Kong	10.08	10.79	10.22	9.99
Czech Republic	25.50	24.63	25.10	25.17
Hungary	314.8	279.2	291.2	290.5
Poland	4.458	4.109	4.080	4.205
Singapore	1.683	1.747	1.610	1.614
Philippines	56.93	60.09	54.14	54.53
Thailand	40.96	42.22	40.33	40.03
Indonesia	11771	12170	12706	12024
China	8.171	8.983	8.214	8.130
Turkey	2.452	2.311	2.353	2.326



4.2 OPERATIONAL ASSUMPTIONS

ACTUARIAL ASSUMPTIONS

All cash flows (premia, expenses, commissions, death and surrender claims, etc...) are included on a best estimate basis up until the termination of AXA's obligations towards the policyholder and beneficiaries. AXA's embedded value uses an active basis where the assumptions are adjusted to reflect historical experience. The assumptions are reviewed at least on an annual basis.

The historical trend of past mortality improvements for life insurance business has been assumed to continue for part of the future projection at a more conservative level than historical experience. However, Annuity business in all markets reflects the expected continuation of past mortality improvement trends into the future; this combination of partially reflecting improvement trends for life insurance business while fully reflecting it for annuities is on balance prudent.

TAX ASSUMPTIONS

The following table shows the nominal tax rates applied. In most jurisdictions different tax rates apply to different types of income and expense, so effective tax rates will vary. Generally, stochastic projections also reflect the impact of economic scenarios on the sources of taxable income and the recoverability of tax loss carry forwards. The tax recoverability is assumed in accordance with current IFRS principles at the level of each tax group using the best estimate of future taxable profits consistent with the illustrative investment assumptions in Appendix 1.

Tax Rate	2011	2012
United States	35%	35%
France	34%	34%
United Kingdom	27%	18%
Sw itzerland	21%	21%
Japan	36%	33%
Belgium	34%	34%
Hong Kong	0,875% of premia	0,875% of premia
Germany	32%	32%
MedLA	32%	32%
CEE	17%	19%

EXPENSES

The EEV methodology makes full provision for all expenses. Consistently with IFRS disclosures, operating entities are recharged with most holding companies' expenses, which therefore are included in local unit costs. The VIF includes the present value of future projected expenses related to Life & Savings business. No productivity gains are built into the projected future expenses, and a provision is made for future inflation. Base inflation rates may be increased for some specific areas such as healthcare costs or salaries.

The expense basis used to estimate projected unit costs does not include productivity-oriented and one-off expenses, although they are naturally considered in the current year's result impacting the movement in ANAV. Productivity oriented expenses are those incurred investing in and developing projects that will give rise to future benefits. As those benefits are excluded from projections in accordance with CFO Forum EEV Principles and Guidance, the related expense is also excluded. One-off expenses might not lead to future benefits, but are not expected to be repeated in future years, hence also are excluded from the expense basis for VIF.



Excluded expenses						
Euro million, Group share, pre-tax	2011	2012				
United Kingdom	42	57				
Germany	45	48				
United States	45	44				
France	24	32				
Belgium	9	7				
MedLA	5	6				
CEE	2	7				
Other countries	3	1				
Total excluded expenses	176	202				

The level of excluded expenses increased in 2012 compared to 2011, driven by the UK and France.

In the UK, most of the excluded expenses were related to the restructuration of the business following the sale of a significant part of the business to Resolution Ltd in 2011. As results of these investments, costs are expected to progressively decrease in the following years.

In France, the increase was linked to the growth of the bank activity and a strategic review of the salaried forces, expected to lead to costs reductions in the future years.

MODELING OF PARTICIPATING AND ADJUSTABLE CREDITED RATES BUSINESS

Participating business is generally characterized by the following key features:

- a minimum interest rate or level of bonus is guaranteed on the contract. At least the guaranteed rate or bonus is credited under all circumstances. Hence, whenever fund return does not achieve the minimum performance, the shareholder will bear the cost of maintaining the guaranteed level
- generally bonuses and crediting rates will exceed minimum guaranteed levels. The amount credited will be based on profit sharing rules as well as the performance of the investment markets and will involve a degree of management discretion.

Given the above, it is essential in a stochastic framework, when future expected performance varies, that the value reflects how bonuses and crediting rates are determined. This will impact the value in the following manner:

- the guaranteed interest rate and any further policyholder participation in profits which is not linked to the actual investment results above the reference interest rate will impact the certainty equivalent value.
- the profit sharing rule will impact the Time Value of O&G depending on the market performance. In cases where the market performs well the policyholder will participate in the investment profits while in case of negative market performance the shareholder will bear a higher portion if not all of the loss. The level of the Time Value of O&G will reflect the likelihood of these additional payments being made, net of the amount reflected as intrinsic value in the certainty equivalent value.

The participating features of businesses are usually a combination of contractual / legal, and management discretion based on competitors' pressure or market practice (where management actually chooses the level of credited rate, over and above the guaranteed rate).

In all operations where this is relevant, the participating business has been modeled to reflect contractual and regulatory constraints, in addition to how AXA manages the business.

Where there are participating funds that can be apportioned between shareholders and policyholders, the limited residual funds at the end of the projection period are apportioned between shareholders and policyholders.



APPENDIX 1: DETAILS ON THE IMPLIED DISCOUNT RATES

As explained previously in the report, the risk-neutral valuation method applied in AXA's EEV means that future returns of different asset classes are directly derived from the reference rate and market implied volatility assumptions. The methodology is equivalent mechanically to assuming that the expected return on all asset classes is in average the reference forward rate. However, to facilitate comparisons to other companies (especially those not following a market consistent basis), and to Traditional EV, we have made calculations with illustrative future investment returns, and derived implied risk discount rates. The illustrative assumptions for 2011 and 2012 are shown in the tables below. It is important to always view IDRs in the context of their illustrative investment assumptions, because a change in assumptions will change IDR.

2011	FI Return	Equity Return	Cash Return	Real Estate Return	"Other" Return	Inflatio n rate	Life VIF IDR	Life NBV IDR
France	4.3%	7.1%	3.9%	5.2%	n/a	1.9%	7.1%	5.4%
United States	7.0%	5.5%	5.0%	7.0%	6.0%	2.5%	42.2%	8.1%
Germany	4.9%	6.7%	3.9%	5.2%	6.0%	2.9%	5.5%	4.6%
Sw itzerland	3.7%	3.3%	3.0%	6.9%	3.3%	1.5%	3.9%	4.0%
Belgium	4.3%	6.7%	4.2%	5.2%	6.7%	1.9%	9.9%	6.4%
CEE	4.4%	5.6%	3.6%	2.4%	0.4%	1.9%	5.7%	5.0%
United Kingdom	5.2%	7.8%	4.1%	6.2%	n/a	3.7%	5.1%	5.5%
Japan	3.2%	4.0%	n/a	n/a	2.0%	1.0%	6.2%	3.3%
Hong Kong	6.3%	9.0%	5.0%	7.0%	9.6%	2.5%	7.5%	5.9%
MedLA	4.7%	6.7%	3.6%	5.6%	2.1%	1.9%	15.2%	5.5%
TOTAL Life & Savings	4.7%	5.9%	4.0%	5.9%	4.6%	2.0%	10.4%	5.2%

2012	FI Return	Equity Return	Cash Return	Real Estate Return	"Other" Return	Inflatio n rate	Life VIF IDR	Life NBV IDR
France	4.7%	6.7%	3.6%	5.9%	n/a	2.0%	5.4%	4.4%
United States	6.6%	4.5%	4.0%	n/a	7.7%	2.5%	20.4%	7.5%
Germany	5.5%	6.7%	3.6%	6.0%	n/a	2.9%	4.5%	4.3%
Sw itzerland	3.7%	3.3%	3.2%	4.8%	3.3%	1.5%	3.9%	4.1%
Belgium	4.5%	3.7%	3.8%	6.0%	6.5%	2.0%	9.4%	5.9%
CEE	4.1%	9.4%	3.1%	2.0%	0.2%	2.6%	4.9%	4.0%
United Kingdom	6.3%	6.6%	4.0%	7.7%	n/a	4.5%	4.3%	4.2%
Japan	3.2%	4.0%	n/a	n/a	2.1%	0.5%	4.3%	3.1%
Hong Kong	4.1%	9.4%	3.1%	2.0%	0.2%	2.6%	6.8%	5.2%
MedLA	5.2%	6.7%	3.5%	6.0%	5.0%	2.0%	13.0%	3.8%
TOTAL Life & Savings	4.6%	5.6%	3.0%	3.9%	2.3%	2.0%	7.0%	4.5%

Fixed income returns vary even within one economy due to different durations and average quality of fixed income holdings.

The drivers of the evolution of the Total IDR for each country are described in the Detailed Results section of this report. IDRs are disclosed on the basis of discounted distributable earnings including the impacts of required capital which is roughly comparable to the discount rates used in Traditional EV.



APPENDIX 2: RECONCILIATION OF THE IFRS SHAREHOLDERS EQUITY TO GROUP EV

FY12 Group Embedded Value ("Group EV") was calculated as the sum of the Life & Savings EEV and the IFRS Tangible Net Asset Value (TNAV) plus the mark-to-market of debts for other businesses (referred to as AXA methodology in the bottom table). The following table shows reconciliation from the shareholders' equity to the Group EV.

		2012			2011	
Euro million, Group share	Life &	Other	Total	Life &	Other	Total
	Savings	businesses	Group	Savings	businesses	Group
IFRS shareholders' equity	45,449	8,215	53,664	42,272	6,290	48,562
Net URCG not included in shareholders' equity (*)	1,031	2,520	3,551	1,337	2,080	3,417
Excluded TSS/TDI	-	(7,812)	(7,812)	-	(7,835)	(7,835)
Excluded Intangibles	(17,915)	(9,851)	(27,766)	(20,428)	(9,509)	(29,937)
Group IFRS TNAV	28,565	(6,929)	21,637	23,181	(8,975)	14,207
other stat/GAAP adjustments	(675)	-	(675)	559	-	559
Mark to Market debt	-	29	29	-	2,369	2,369
elimination of UCG projected in L&S VIF	(6,247)	-	(6,247)	(2,684)	-	(2,684)
Life & Savings VIF	22,581	-	22,581	17,098	-	17,098
Group EV	44,224	(6,900)	37,324	38,154	(6,606)	31,548

^(*) Does not include net UCG on assets and liabilities related to banking activities.

In 2011 EV report, the value presented for other businesses as "TNAV" was calculated as the sum of the IFRS TNAV for other businesses presented above, plus the mark-to-market of debts. This value for other businesses was Euro -6,606 million in 2011, and was Euro -6,900 million in 2012.



APPENDIX 3: GLOSSARY

Adjusted opening Life & Savings EEV:

This is the balance published for previous year closing, adjusted by modeling and opening adjustments. It serves as the basis for calculating Operating Return on Life EEV and Total Return on Life & Savings

EEV

ANAV: Adjusted Net Asset Value. The tangible net assets on a mark to market-value basis derived equivalently

either from consolidating the local regulatory (statutory) balance sheet or adjusting the consolidated IFRS balance sheet. It excluded a portion of unrealized capital gains and losses which is projected in the

VIF.

APE: Annual Premium Equivalent. A measure of new business volume, equal to 100% of regular premia on

newly issued recurring premium contracts plus 10% of single premia received. APE links closely to the current period cash inflow of business, but is adjusted from the raw premium number because typically

single premium policies will generate less profit than recurring premium policies.

Capitalization factor: This is the multiple of regular premium that single premium plus capitalization factor times regular

premium equals PVEP; it is a rough measure of the duration of regular premia business

Certainty Equivalent PVFP: The present value of future statutory after-tax profits, projected over the remaining duration of liabilities

in a scenario where all investments are assumed to earn the reference rate.

CoC/NFR: Cost of Capital/Non-Financial Risks. This is the cost of holding capital in excess of the policy reserves.

Please refer to required capital definition.

Comparable basis Change on a comparable basis was calculated at constant FX and scope

Current year investment experience:

This includes the variance in experience during the year from that expected in the illustrative investment scenario at the end of the previous year, and the change in value created by reflecting the current

yearend yield curves and investment assumptions in the VIF rather than those of last year.

Free surplus This represents the assets not supporting policy liabilities and required capital

Group EV The Group EV is the Life & Savings EEV plus IFRS shareholders equity of other business

IDR: Implied Discount Rate. This is the discount rate which would reproduce the market consistent VIF from a

deterministic projection of statutory distributable earnings in an illustrative scenario.

Implicit items This represents the amounts allowed by local regulators to be deducted from capital amounts when

determining the required minimum margin.

NBV: New Business Value. The value of new business issued during the current year consists of the VIF of

new business at the end of the year plus the statutory profit result of the business during the year. Usually the first year statutory profit is negative due to the costs of acquiring business; this negative profit at the point of sale is commonly referred to as "new business strain." AXA calculates this value net

of tax.

NBV margin: Equals NBV divided by APE.

NBV/PVEP Margin: Equals NBV divided by PVEP.



Operational changes:

These are the impact on the VIF of changes in future assumptions for items like mortality, expenses, lapse rates, as well as the impact of actual versus expected experience.

Operating performance from existing business:

This considers the movements in EEV related to the business inforce at the beginning of the year, excluding the investment impacts that relate to variances from the illustrative investment assumptions used in the previous year.

Operating Return on EEV:

This is the movement in the Embedded Value from the beginning to the end of the year, <u>excluding</u> the following elements:

- modeling changes or other opening adjustments,
- exchange rate impacts,
- the impact of acquisitions,
- capital flows into or out of the Life & Savings segment,
- the difference between actual investment performance and that expected as reflected in the IDR at the beginning the year, and
- any change in investment assumptions for the future, other than those directly tied to observing current market prices.

This therefore includes:

- unwind of discount at the beginning of year IDR on VIF + Required Capital,
- expected return on free surplus assets (i.e. those not supporting policy liabilities and required capital),
- new business impacts,
- differences in operational experience from that expected, and any changes in operational assumptions.

PVEP:

Present Value of Expected Premia. A measure of new business volume, equal to the present value at time of issue of the total premia expected to be received over the policy term. The present value is discount at the reference interest rate. While the measure is not as closely linked to cash received in the current period as APE, the ratio of NBV/PVEP is a more economical indicator of profit margin than is the ratio of NBV/APE.

Required capital

This represents the amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted. The level of capital held is at least the amount necessary to maintain a solvency coverage equal to 1.5 times the local minimum solvency ratio net of implicit items. The amount of required capital net of implicit items (the "hard capital") is at least the amount corresponding to a coverage ratio equal to 0.75 times the local minimum solvency coverage ratio.

Reference interest Rate:

Refers to the risk free rate proxy used as the basis for the market-consistent valuation. It is the sum of swap rates and a premium over swap rates to reflect the ability, for insurers with long term liabilities to earn risk free returns in excess of swaps by investing in credit assets as corporate bonds.

Risk Neutral Value:

This is equal to the sum of Certainty Equivalent PVFP and Time Value of O&G

Time Value of O&G:

Time Value of Options & Guarantees. This is the difference between the value of business determined across a range of scenarios and the value determined in a single scenario. The single scenario contains some intrinsic value of O&G that are "in the money" in that scenario and the stochastic projection allows the total value of the O&G to be determined. The difference represents the Time Value.

Total Return on EEV:

The Operating Return on EEV, plus the impact of investment experience during the year differing from that assumed for the beginning of year IDR. Total return on Life & Savings European Embedded Value (EEV) excludes the impact of capital transfers, modeling changes, EEV of acquired business and foreign exchange effect.

VIF:

Value of inforce. The discounted value of local regulatory (statutory) profits projected over the future duration of existing liabilities. This is equal to the sum of Certainty Equivalent PVFP, Time Value of O&G and CoC/NFR.



APPENDIX 4: REPORT ON EMBEDDED VALUE

Report on the 2012 AXA Embedded Value

To the AXA Group Chief Financial Officer

As statutory auditors of AXA Group and in accordance with your request, we have examined the Life & Savings European Embedded Value (EEV) information regarding the EEV and its components, the new business value, the analysis of movement in EEV and the sensitivities (hereinafter referred to as "the EEV Information") at December 31, 2012 of the AXA Group contained in the attached document ("Embedded Value 2012 Report" hereinafter referred to as "the EV Report").

The EEV Information and underlying significant assumptions, upon which the information relies, have been established under the responsibility of management. The methods and significant assumptions adopted are detailed in the EV Report.

We are responsible for expressing a conclusion on the compliance of the results of the EEV Information with the methodology and assumptions adopted by management and on the consistency of accounting information used with the AXA Group consolidated financial statements at December 31, 2012.

Our work, which does not constitute an audit, has been performed in accordance with the professional standards applicable in France, and aims at forming a conclusion based on appropriate procedures.

Our work included the following procedures:

- Understanding the procedures adopted by management to prepare the EEV Information.
- A review of the "market consistent" approach adopted by management, and described in the EV Report for consistency with the European Embedded Value Principles and Guidance defined by the European Insurance CFO Forum.
- A review of the consistency of the methodology used and implemented by management with that described in the EV Report.
- A review of the internal consistency of the economic assumptions and of their consistency with observable market data.
- A review of the consistency of the operational assumptions with regard to past, current and expected future experience.
- A review of the testing performed by management on the underlying models used to calculate the EEV Information.
- Checking by review and reconciliation the consistency of the EEV Information with the methodology and assumptions in the EV Report.
- Checking the consistency of the accounting information and other relevant underlying data used in preparing the EEV Information with the annual financial statements and underlying accounting records at December 31, 2012.
- Obtaining the information and explanations as deemed necessary to deliver our conclusion.

We note that, due to the uncertain nature of estimation, actual outcomes can differ, perhaps significantly, from those expected in the EEV Information. We express no conclusion relating to the possibility of such outcomes.

Based on our work, we have no observations, regarding:

- The compliance of the results of the EEV Information at December 31, 2012 that AXA Group presented in the EV Report with the AXA Group's market consistent methodology and assumptions adopted by management



and described in the EV Report which are consistent with the European Insurance CFO Forum EEV Principles and Guidance.

- The consistency of accounting information used with the AXA Group consolidated financial statements at December 31, 2012, on which we expect to issue our audit report on the 20th March 2013.

Neuilly-sur-Seine and Courbevoie, 21 February, 2013

Pricewaterhou	seCoopers Audit	Mazar	s
Michel Laforce	Stéphane Kuypers	Gilles Magnan	Maxime Simoen