

THE AREAS OF GREATEST SUBJECTIVITY AND INTEREST WITHIN THE IFRS FINANCIAL STATEMENTS OF LARGE INSURANCE GROUPS AS AT 31 DECEMBER 2011

Mazars Insight

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SCOPE OF STUDY

Mazars has analysed the 31 December 2011 published annual reports of 13 European insurance and reinsurance groups (the ‘sample’ group):

Country	Insurance and Reinsurance groups
France	Axa, Scor, CNP Assurances, Groupama ⁽¹⁾
Germany	Allianz, Munich Re
United Kingdom	Aviva, Old Mutual
Switzerland	Swiss Life, Zurich
The Netherlands	Aegon
Italy	Generali
Spain	Mapfre

(1) Unlisted

The sample group has been enlarged to include bank insurance groups on some topics, particularly regarding financial instrument impairment methodologies.

We have also included some non-European sample entities publishing their Financial Statements under IFRS: AIA (Hong Kong), Great Eastern (Singapore), QBE (Australia), MetLife and Prudential (USA). These are presented in dedicated purple boxes.

Where relevant, extracts from these financial reports have been used to illustrate our findings.

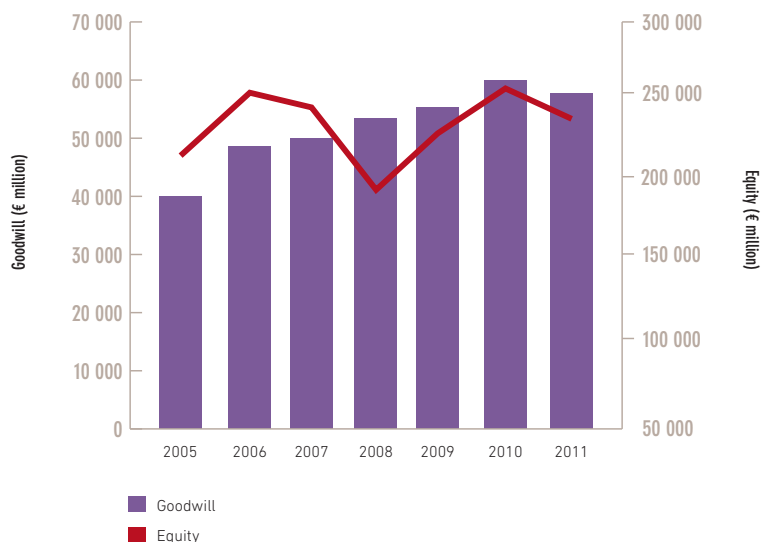
GOODWILL: RECOVERABILITY TEST AND RELATED DISCLOSURES

Given the context of the continuing financial crisis, we dedicated the first part of our survey to goodwill and more specifically the information disclosed regarding its recoverability and the application of IAS 36.

1. Consequences of the financial crisis

Before the financial crisis, a significant rise in the volume of mergers and acquisitions occurred in the European insurance market. These transactions had an impact on insurers' and reinsurers' goodwill which increased by 40%, i.e. €15 billion, between 2005 and 2008.

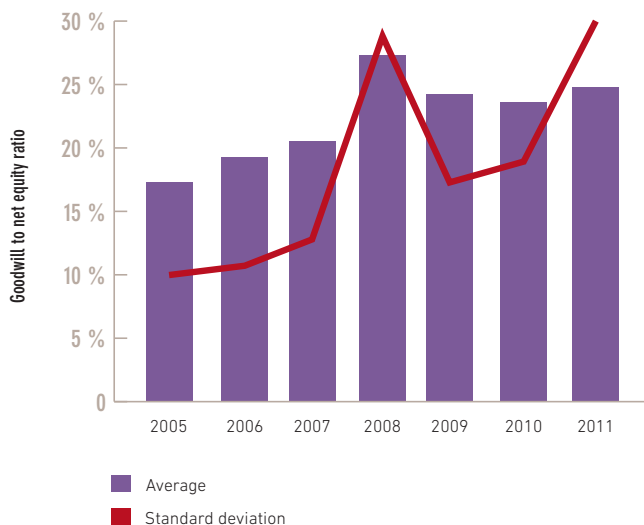
The financial crisis that started in 2008 caused a dramatic fall of the financial market and turned into a deep crisis of the real economy. The year 2011 has been particularly impacted by the euro-zone sovereign debt turmoil, leading many market players to adjust their investment strategy. The total amount of the goodwill before impairment of the groups in our sample decreased in 2011: for the first time asset disposals have been higher than new acquisitions.



In the meantime, insurers' equity remains highly sensitive to the financial markets and following the rebound at the 2010 year-end has fallen again. The aggregate market value of the groups in our study decreased by €20 billion (-8%) compared to last year.

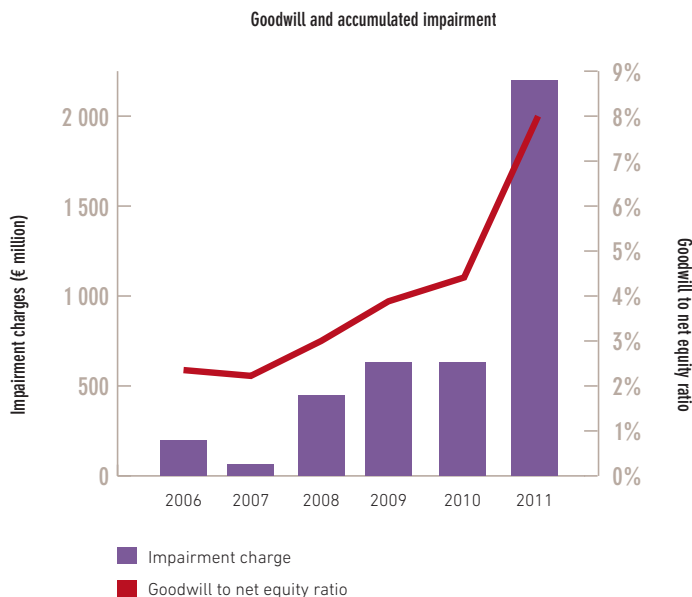
As a consequence, the average goodwill to net equity ratio has been increasing, reaching 25% at year-end 2011. The goodwill to net equity ratio standard deviation is also high demonstrating:

- Different investment strategy among the groups in our study; but also
- That ratio sensitivity to market volatility is different from one insurer to another.



The economy remains challenging for insurers. Given the uncertainties in the financial markets and the pessimistic view on the potential growth of European insurance and reinsurance markets, the forecasted future margins of the insurers are still being impacted by the prolonged effects of the financial crisis.

Therefore, the main assumptions used for goodwill impairment testing have deteriorated compared to those that prevailed at the time of the acquisitions. The investments value in use is decreasing and has lead insurers to book significant impairment, as highlighted in the following graph:

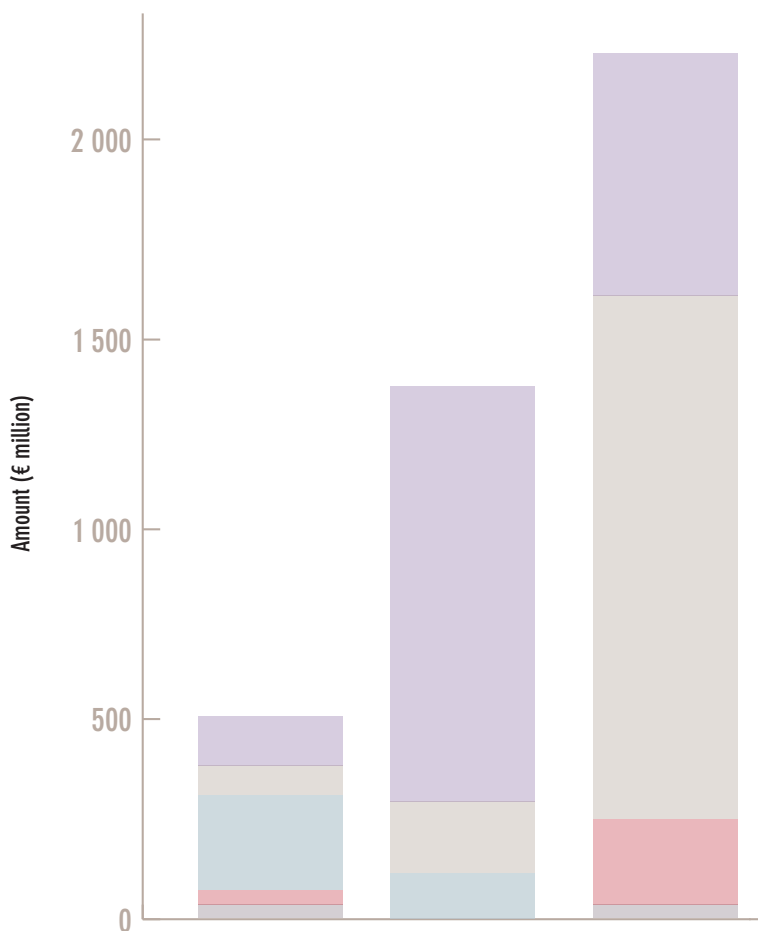


Among the groups in our study, goodwill impairments amounted to €2.2 billion for 2011 (against €0.7 billion in 2010 and in 2011); of the number of goodwill balances 8% are now impaired. This trend may evidence:

- Deterioration of forecast future margins that justify goodwill recoverability; or
- The necessity to change assumptions in the models in order to reflect the persistently adverse economic environment (low interest rates, prolonged decline of stock markets, high market volatility).

Moreover, the analysis of changes in gross goodwill and impairment by geographical area (following graph) highlights the strategic direction provided by the major European insurers: new goodwill is being generated on acquisitions in emerging countries (South America), while asset disposals and impairments are noted in the year in Europe and North America.

Change in goodwill – Geographical Spread



Geographical area	Acquisition	Disposal	Impairment
Europe	154	1 097	545
North America	49	141	1 417
South America	235	102	0
Asia	32	0	177
Others	36	2	29

The consequences of this environment are the following:

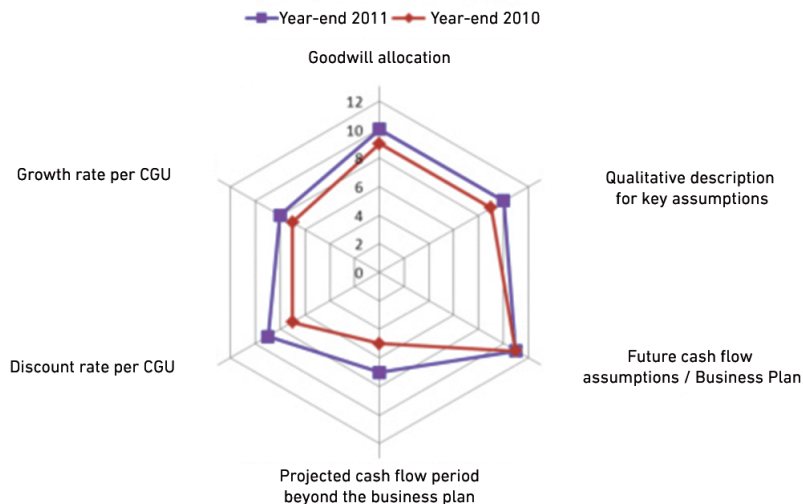
- Goodwill impairment tests are more than ever a critical topic for year-end closing and financial disclosures; and
- Investors are very interested in the information related to recoverability tests such as those facilitating an understanding of the assumptions used, computation methodology and sensitivity analysis.

2. Relevance of the information provided

The purpose of this part of our survey was to check compliance with IAS 36 requirements, but also to analyse information disclosed by the insurers regarding goodwill impairment test process. This is particularly relevant as the standard requires interpretation and judgement.

Given the economic environment, the groups in our sample provided more information than in previous years in order to meet the investors', analysts' and regulators' expectations. As evidenced in the following graph, we notice an overall improvement in the information related to the impairment tests approach.

Quality of the information related to impairment test approach

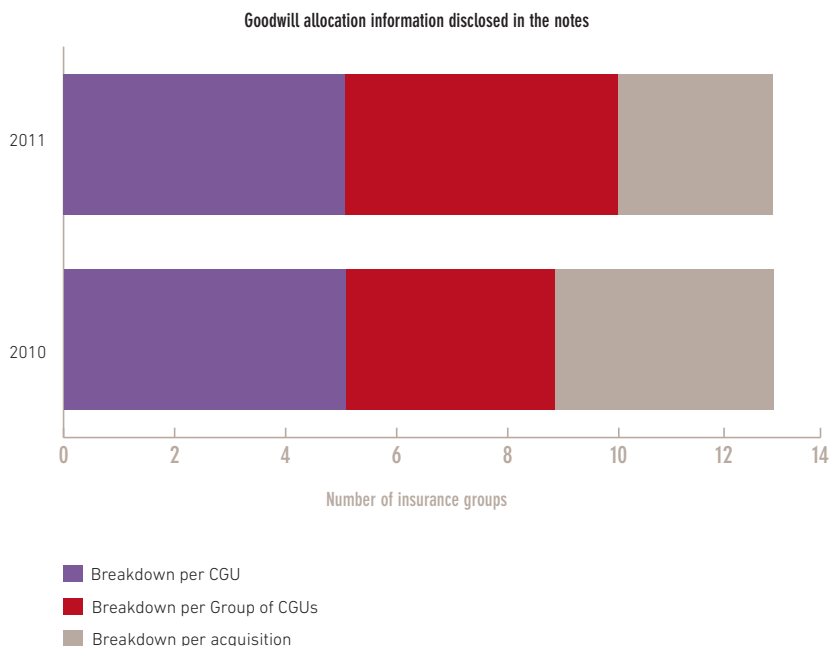


The survey focuses on the following points:

- Goodwill allocation to Cash Generating Units (CGUs);
- Valuation method and approach to determine the key assumptions;
- Information produced on key assumptions: future cash flows, period of projection, growth rate and discount rate; and
- Impairment test sensitivity analysis.

Goodwill allocation to CGUs

For the purpose of the impairment test, goodwill must be allocated to Cash Generating Units or groups of CGUs. The standard requires this allocation to be disclosed in the notes to the financial statements, at a minimum for the most significant goodwill.



When the disclosure is made per acquisition, the information allows users of the financial statements to understand the link between the entities acquired and the corresponding CGU and operating segments. Below are two examples of disclosure:

As of December 31,

2011

	Goodwill € mn	Brand names € mn
Cash generating units		
Property-Casualty		
German Speaking Countries	284	—
Europe	851	—
South America	22	—
NAFTA Markets	—	—
Global Insurance Lines & Anglo Markets	317	—
Asia-Pacific and Middle East	88	—
Central and Eastern Europe	454	24
Specialty Lines I	38	—
Specialty Lines II	18	—
Subtotal	2,072	24
Life/Health		
German Speaking Countries	592	—
Health Germany	325	—
Europe	642	—
NAFTA Markets	444	—
Asia-Pacific and Middle East	171	—
Subtotal	2,174	—
Asset Management	6,985	—
Corporate and Other		
Banking Germany	—	—
manroland AG	—	—
Selecta AG	491	286
Subtotal	491	286
Total	11,722	310

Source: Allianz, 2011 Annual Report (p.251)

(in Euro million)	Transaction year	Gross value December 31, 2011	Accumulated impairment December 31, 2011	Net value December 31, 2011
AXA Turkey (Oyak)	2008	216	-	216
AXA Mexico (Seguros ING)	2008	540	-	540
AXA MPS (Montepaschi)	2007 & 2008	724	-	724
AXA Greece (Alpha Insurance)	2007	123	-	123
AXA Bank Hungary (ELLA Bank)	2007	59	(59)	-
Swiftcover	2007	250	-	250
UK Life & Savings ^(b)		599	-	599
Winterthur ^(b)	2006	2,605	-	2,605
MLC	2006	118	-	118
Seguro Directo	2005	31	-	31
MONY	2004	206	-	206
AXA Financial, Inc.	2000	2,915	(1,008)	1,907
Sanford C. Bernstein	2000	3,293	-	3,293
AXA UK Holdings (SLPH) ^(b)	2000	588	-	588
AXA Japan (Nippon Dantai) ^(c)	2000	1,849	(96)	1,753
AXA China Region	2000	251	-	251
AXA Aurora	2000	120	-	120
Rosenberg and other AXA IM transactions	1999 & 2005	183	-	183
Guardian Royal Exchange ^(b)	1999	630	-	630
AXA Belgium (Royale Belge)	1998	452	-	452
UAP ^(b)	1997	457	-	457
Others ^(b)		809	(1)	809
TOTAL		17,019	(1,164)	15,855
Of which:				
Life & Savings		7,928	(1,104)	6,824
Property & Casualty		4,502	(1)	4,502
International Insurance		34	-	34
Asset Management		4,427	-	4,427
Others		127	(59)	68

Source: AXA, 2011 Annual Report (p.269)

Even if most of the groups' disclosures in our study are compliant with the standard, the CGU definition remains generic (as noted in IAS 36). Thus, it is still challenging for readers of the financial statements to understand the approach used by the insurers to identify CGUs. The effects on goodwill and goodwill impairment can be different from one group to another depending on the CGU allocation approach. Only two groups in our study highlight the fact that a CGU corresponds to a consolidated segment carrying a specific business (i.e. operating segment) and in a specific geographical area.

Moreover, in the case of allocation to groups of CGUs, the IASB recommend explaining and justifying that it represents the lowest level within the entity at which goodwill is monitored for internal management purposes and that group of CGUs are not larger than an operating segment as defined by paragraph 5 of IFRS 8 - Operating Segments before aggregation.

In spite of those recommendations, the groups in our study did not disclose specific information regarding the grouping of CGUs. However, the link between the goodwill breakdown as stated in the notes related to impairment tests and the intangible assets per operating segment has been disclosed in most instances.

Valuation method and approach taken to determine the key assumptions

For the purpose of the goodwill impairment test, the recoverable amount is the higher of the fair value of the CGU and its value in use. Practically, we noticed that the value in use calculation is the most frequently used which itself results in even more judgemental assumptions within the valuation process.

It is critical to disclose the valuation method used and explain the approach taken to determine the key assumptions. The discounted cash flow approach is most frequently used but for life insurance businesses, embedded value type models are preferred.

Most of the European insurers disclose a qualitative description of the valuation method and the approach taken to determine the key assumptions. However the information regarding the calibration of the assumptions is not always disclosed

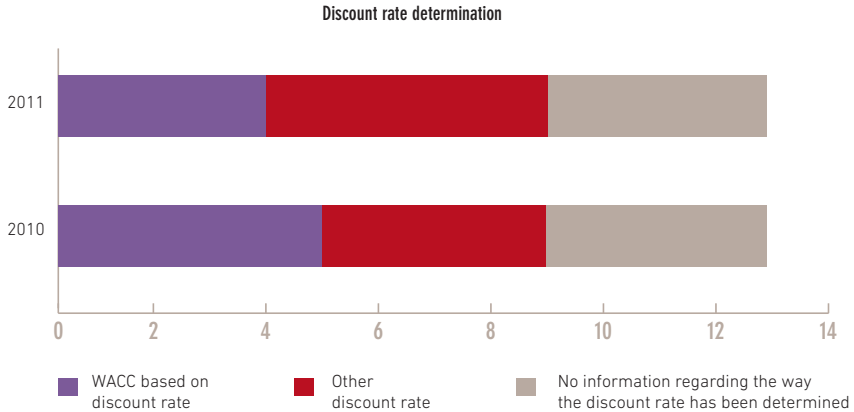
and remains diverse. In addition to this, it is challenging for the reader to assess whether these assumptions are derived from past experience or based on external sources.

For instance, the growth rate determination is rarely disclosed. The discount rate information, being one of the assumptions with the most impact, is more comprehensive compared to previous years, but remains different from one insurer to another.

The standard states that the discount rate must reflect the market assessment of the specific risks related to the cash flows derived from the asset considered. Therefore the Weighted Average Cost of Capital ('WACC') is a relevant approach that has been frequently used.

However, the implementation of the WACC approach varies from one insurer to another. According to the standard, the discount rates must be adjusted to reflect the market data and not the insurance company's internal data. Thus, the rate should be independent of the way the entity financed the purchase of its assets.

Moreover, many other valuation methods other than the WACC approach can be used to determine the discount rate. We noticed at least five alternative approaches used by the groups in our study. These different approaches impede the comparability of the financial statements.



Among the five insurance companies in our study that use a different approach than the WACC, four of them state that the discount rate use is consistent with a WACC based rate.

The following extracts are from various financial statements and illustrate the differing disclosures between the study members.

The Group usually calculates value in use as the net asset value of the CGU plus the present value of expected future revenues from existing portfolios and new business.

Expected future cash flows are based on the assumption that the business will continue over the long-term and that relations with banking partners will be pursued beyond the renewal date of current agreements, as well as on forecasts that have been validated by the Board of Directors and extrapolated in line with the growth rates generally used within the industry for the businesses concerned, and using conservatively estimated discount rates in line with the average weighted cost of capital.

Source: CNP Assurances, Consolidated Financial Statements 2011 (p.18)

In order to estimate the fair value of SCOR Global P&C for the purpose of impairment testing, SCOR uses a discounted cash flow model comprised of an earnings model, which considers forecasted earnings, and other financial ratios of the reportable segment based on Board approved business plans. Business plans include assessments of gross and net premium expectations, expected loss ratios and expected expense ratios together with actuarial assumptions such as the coefficient of variation on ultimate net reserves together with assumptions as to the mean time to payment of existing reserves and future business. SCOR uses euro risk free interest rates and the estimated SCOR Group cost of capital 8.97% as derived from the Capital Asset Pricing Model (CAPM) for discounting purposes. SCOR also uses conservative growth rate assumptions in its valuation models.

Source: SCOR, Financial Statements 2011 (p.222)

fair value of the CGU is determined on the basis of current market quotation or usually adopted valuation techniques (mainly DDM or appraisal value based on EBS). The Dividend Discount Model is a variant of the Cash flow method. In particular the Dividend Discount Model, in the excess capital methodology, states that the economic value of an entity is equal to the discounted dividends flow calculated considering the minimum capital requirements. Such models are based on projections on budgets/forecasts approved by management or conservative or prudential assumptions covering a maximum period of five years. Cash flow projections for a period longer than five years are extrapolated using estimated among others growth rates. The discount rates reflect the free risk rate, adjusted to take into account specific risks.

Source: Generali, Financial Statements 2011 (p.111)

Information related to the key assumptions

In addition to the qualitative information required by the standard, insurance companies are expected to provide information regarding:

- Projected cash flows;
- Period of projected cash flows and justification if it exceeds five years;
- Growth rate to extrapolate the cash flows; and
- Discount rate.

For each of these key assumptions, we reviewed the relevance and the accuracy of the information provided. While an increasing majority of insurers have provided detailed information for each CGU only three groups in our study disclosed all key assumptions for every CGU.

Regarding impairment testing, most of the insurers use a 3 to 5 years business plan approved by management. The period of projected cash flows that exceeds the period of the business plan is however not always disclosed. This information is critical in order to assess the proportion of new business in the value in use. The following extract is an example of the best practice in this regard:

The expected future cash flows are taken from the five-year business outlook (2011-2016) validated by management and extrapolated using a stable growth rate (of between 1.9% and 3.2%) for new business between 2015 and 2034 (when the current agreement with Barclays expires), and then discounted to present value using post-tax discount rates of 8.36%, 12.2% and 8.5% for the Spanish, Portuguese and Italian businesses, respectively.

Source: CNP Assurances, Consolidated Financial Statements 2011 (p.44)

The information regarding discount rate and growth is also more exhaustive compared to last year perhaps addressing more closely the expectations of readers' of the financial statements. The discount rate remains the most detailed key assumption among all the information related to goodwill impairment tests.

Below are three different but complete presentations regarding discount rates and growth rates.

Cash generating unit	Discount rate %	Eternal growth rate %
Property-Casualty		
German Speaking Countries	7.4	1.0
Europe	8.0	1.0
South America	16.3	3.0
Asia-Pacific and Middle East	9.5	3.0
Central and Eastern Europe	10.5	2.4
Global Insurance Lines & Anglo Markets	8.1	1.0
NAFTA Markets	8.0	1.0
Specialty Lines I	7.7	1.0
Specialty Lines II	7.9	1.0
Asset Management	9.0	1.0
Banking		
Banking Germany	8.5	1.0

Source: Allianz, Annual Report 2011 (p.250)

In CHF million	Insurance Switzerland		Insurance Germany		AWD	
	31.12.2011	31.12.2010	31.12.2011	31.12.2010	31.12.2011	31.12.2010
Net carrying amount of goodwill	81	81	258	265	774	794
KEY ASSUMPTIONS USED FOR IMPAIRMENT TESTS						
Growth rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Discount rate	9.3%	9.6%	10.5%	10.7%	9.4%	10.7%

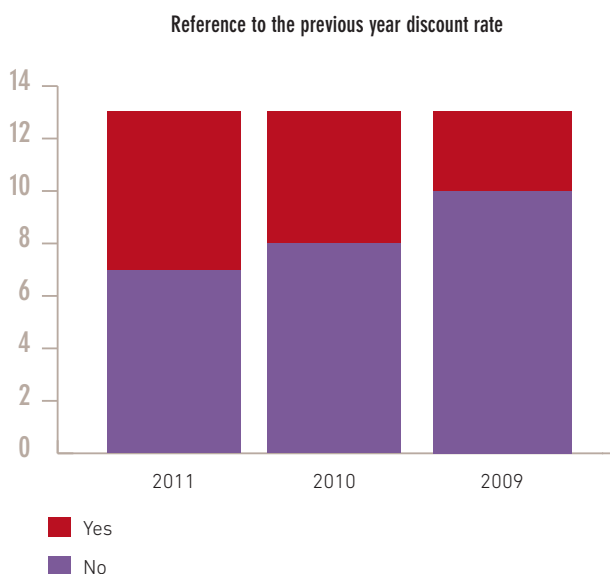
Source: Swiss Life, Annual Report 2011 (p.146)

- The growth rate – The rate used is an inflation based growth assumption, which varies by CGU and is based on external market factors particular to that CGU. Emerging Markets applied the growth rate of 3.4% and 4.2% respectively (2010: nil) to both its life assurance business and asset management business in Mexico and Columbia. Retail Europe, which incorporates a number of European countries, applied a weighted average calculation to determine the growth rate of 2.7% (2010: 2.8%) applied to its life assurance business and of 2.0% (2010: 1.8%) for its asset management business. Wealth Management applied 5.2% (2010: 3.7%) to both its life assurance business and asset management business in the UK, 3.4% (2010: 1.8%) in Italy and 2.3% (2010: 1.7%) in France.
- The discount rate – The applied rate used the relevant 10-year government bond rate as a starting point, which was adjusted for an equity market risk premium and other relevant risk adjustments, which were determined using market valuation models and other observable references. Rates applied were 13.1% (2010: 13.6%) for Emerging Markets, 11.7% (2010: 14.5%) for Retail Europe and 12.7% (2010: 15.8%) for Wealth Management.

Source: Old Mutual, Annual Report 2011 (p.208)

However, the relevance of these figures relies on the quality of the information provided regarding the determination of the key assumptions. We noticed in the previous section that the description of the approach was not always satisfactory. For the specific case of life insurance, the discount rate has to be compared with the asset investment return. None of the life insurance groups in our study disclosed that information.

Insurers are now more communicative on the change in discount rate from one year to another. However, it is still only half of the groups in our study that do so:



Where different key assumptions are used in a group of CGUs, detailed information should be provided for each CGU. For instance an insurer may choose to test intangible assets for each significant country belonging to a given geographical area. In that case, it is required to disclose detailed information for each country instead of providing information at a regional level. We noticed that seven of the groups in our study complied with this recommendation.

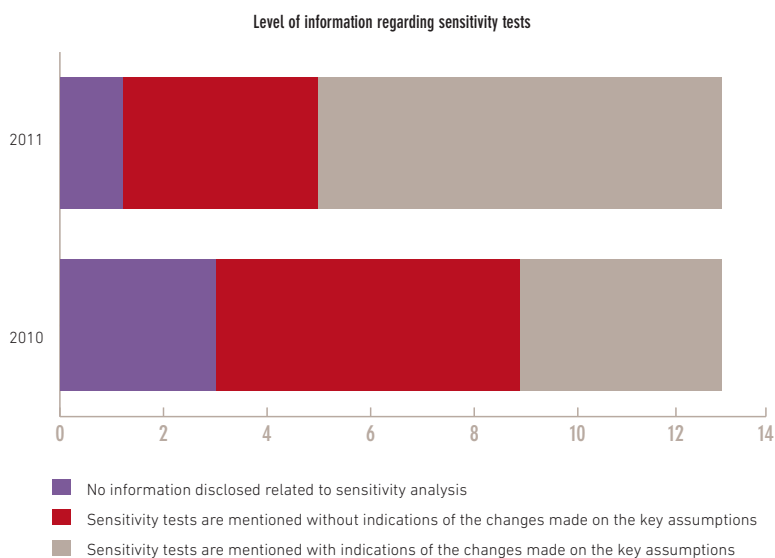
Even if we recognise that the quality of the information related to key assumptions is improving, there are still significant discrepancies from one insurer to another

regarding the details provided and the values of the assumptions used. For instance, for life insurance business in Italy, the discount rate ranges from 7.5% to 12.7% and the growth rate from 2.5% to 3.4%.

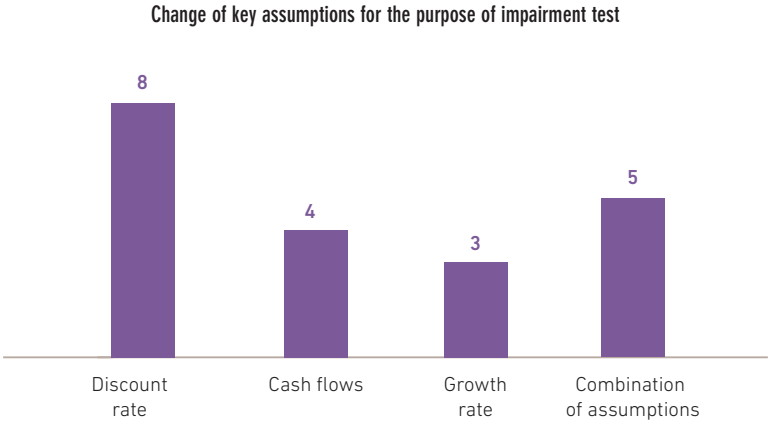
More than ever, it is necessary to disclose the qualitative approach in order for the reader to understand these discrepancies.

Disclosures of impairment test sensitivities

Disclosure of impairment test sensitivities is required by the standard when a reasonable change in a key assumption, on which management has based its determination of the unit's (group of units') recoverable amount, would cause the unit's (group of units') carrying amount to exceed its recoverable amount.



Compared to last year, more information related to sensitivity tests is now disclosed. In 2011, eight groups in our study are now indicating the changes made to key assumptions (compared to four in 2010). The increase in transparency highlights that insurers' headroom margin regarding goodwill impairment tests is narrowing.



The discount rate remains the most modified assumption in the sensitivity analysis, however sensitivities for other assumptions are increasing. Five groups in our study carried out sensitivity analysis based on a combination of variations on different assumptions, which is compliant with recommendations.

The use of scenarios (reflected in the combinations of variations on different but correlated assumptions) is a best practice that brings relevant information to the readers of financial statements:

However, for the goodwill of the CGU in countries of Central and Eastern Europe, an increase of 100 basis points in the discount rate would lead to a need for additional coverage of €57 million (while a lowering of the discount rate by 100 basis points would result in a positive coverage effect of €85 million). On this same CGU, the sensitivity test on the long-term growth rate would also result in a negative coverage effect of €31 million if it fell by 50 basis points (it would be in excess of €37 million with an increase of 50 basis points).

For the goodwill of the CGU of the Greek subsidiary, Groupama Phoenix, an increase of 100 basis points in the discount rate would lead to a need for additional coverage of €5 million (while a lowering of the discount rate by 100 basis points would result in a positive coverage effect of €6 million). The sensitivity test applying to the long-term growth rate has a negligible impact (with a variable variance of +50 basis points, it would be in surplus by €1 million).

In these two cash-generating units, a sensitivity test involving a decline of 10% has also been carried out with regard to expected future cash flows. This test would have an unfavourable effect of some €13 million in Greece and €63 million in the countries of Central and Eastern Europe.

The simultaneous application of all these adverse or favourable scenarios would have an impact almost identical to the cumulative impacts taken separately.

Source: Groupama, Annual Report 2011 (p.197)

While the use of sensitivity analysis for the key assumptions emerges as good practice, explanations of the outcomes as such analysis can be complex and difficult to explain in the financial statements.

When the result of the sensitivity analysis indicates a possible impairment of the carrying value or where an impairment has been recognised, IAS 36 and IAS 1 require the details of the sensitivity surrounding the values to be disclosed.

IAS 36.134f requires that additional information about impairment test sensitivity

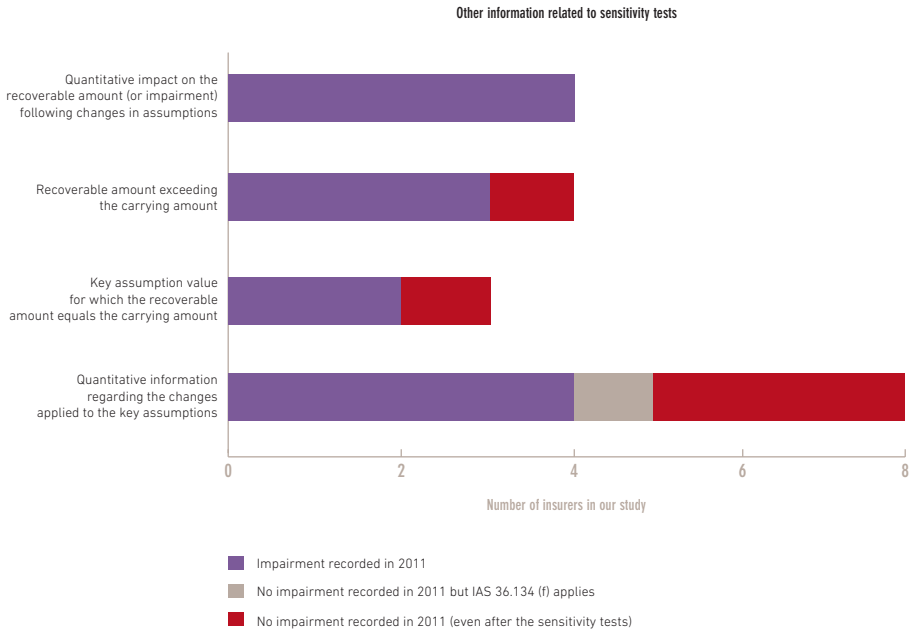
is disclosed when a reasonably possible change in a key assumption on which management has based its determination of the unit's (group of units') recoverable amount would cause the unit's (group of units') carrying amount to exceed its recoverable amount.

When IAS 36.134f applies (two sampled groups identified), the insurer has to disclose the following information:

- The value assigned to the key assumption;
- The amount by which the value assigned to the key assumption must change; and

- The amount by which the unit's (group of units') recoverable amount exceeds its carrying amount.

The analysis of the financial statements shows that the information provided varies from one insurer to another:



Only three insurers in our study, including two that have recorded goodwill impairment in 2011, are fully compliant with the standard. We also noticed that the information provided is not always consistent with the sensitivity test conclusion.

American and Asian insurers are expected to comply with the same requirements as in Europe. However, we noticed that the application of these recommendations varies from one insurer to another:

- The description of the goodwill impairment test process (in two steps for instance in the Prudential financial statements) is exhaustive. This allows understanding the consistency of the analysis performed;
- However, the quantitative information regarding the key assumptions is minimal; and
- The gap between the carrying amount and the value in use, the impairments and the sensitivity analysis are mostly expressed in percentage form.

(C) Impairment testing of intangible assets

The Group's accounting policy in respect of impairment testing of intangible assets is set out in note 1 (T). The recoverable amount of each cash generating unit is determined by reference to a value in use calculation based on the following key assumptions and estimates:

- discounted cash flow projections for a five year period are included in the calculation. This information is extracted from the latest three year business plan which has been presented to and approved by the board;
- projections for years four and five are based on the final year of the three year business plan assuming growth of 2.5% per annum;
- discount rates are pre-tax and reflect a beta and equity risk premium appropriate to the Group; and
- terminal value is calculated using a perpetuity growth formula based on the cash flow forecast for year five and an appropriate discount rate and terminal growth rate.

The discount rates used to value cash generating units at 31 December 2011 were in a range of 7.2% to 11.9% (31 December 2010 range of 9.9% to 15.2%).

Source: QBE, Annual Report 2011 (p.126)

After completion of Step 1 of the quantitative tests, it was determined that fair values exceeded the carrying amounts for each of the three reporting units and it was concluded there was no impairment as of December 31, 2011. The Asset Management, International Insurance's Life Planner and Retirement Full Service businesses had estimated fair values that exceeded their carrying amounts by 425%, 27% and 5%, respectively.

Estimating the fair value of reporting units is a subjective process that involves the use of estimates and judgments. The Retirement Full Service business' quantitative test is sensitive to a number of key assumptions. For example, a decline in its forecasted cash flows of 4%, an increase in the discount rate above 12.5%, or an increase in the equity attributed to support this business (representing the carrying value) of 5% could result in failing Step 1 of the quantitative test and therefore require a Step 2 assessment. Regarding all four reporting units tested, further market declines or other events impacting the fair value of these businesses, including discount rates, interest rates and growth rate assumptions or increases in the level of equity required to support these businesses, could result in goodwill impairments, resulting in a charge to income.

Source: Prudential, Annual Report 2011 (p.126)

3. Conclusion

The information disclosed by the sample group of companies complies with most of the IAS 36 requirements even if there is room for improvement (particularly in the areas of the sensitivity analysis and the assumptions justification). However, the quality and accuracy of the information disclosed varies, hindering the comparison of the financial statements regarding goodwill impairment tests.

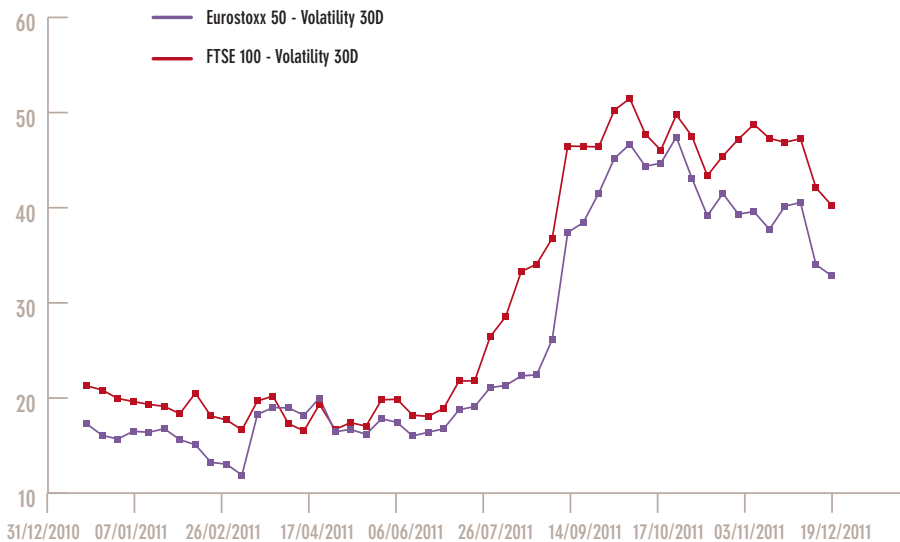
Given the financial crisis context, most of the groups in our study managed to improve their financial disclosures in order to meet financial statements readers' expectations. We noticed that insurers' headroom margin regarding goodwill impairment tests is narrowing. Significant amounts of impairment have been recorded in 2011 and some insurers are now reconsidering their investment strategy.

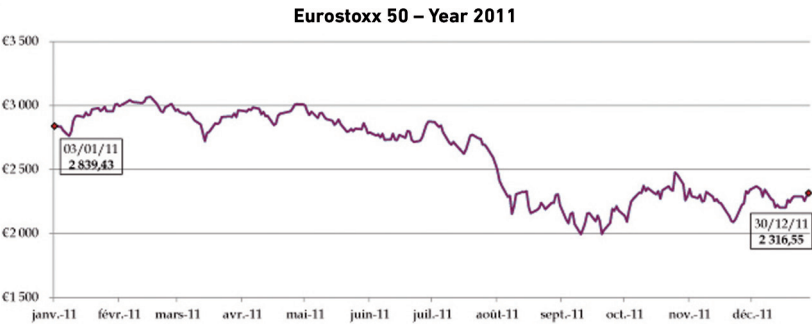
European insurance groups remain exposed to risks than could further impact the forecasts and other assumptions used to assess the value of their businesses. Focus on these disclosures will continue to be relevant for the 2012 financial year.

FINANCIAL ASSETS IMPAIRMENT

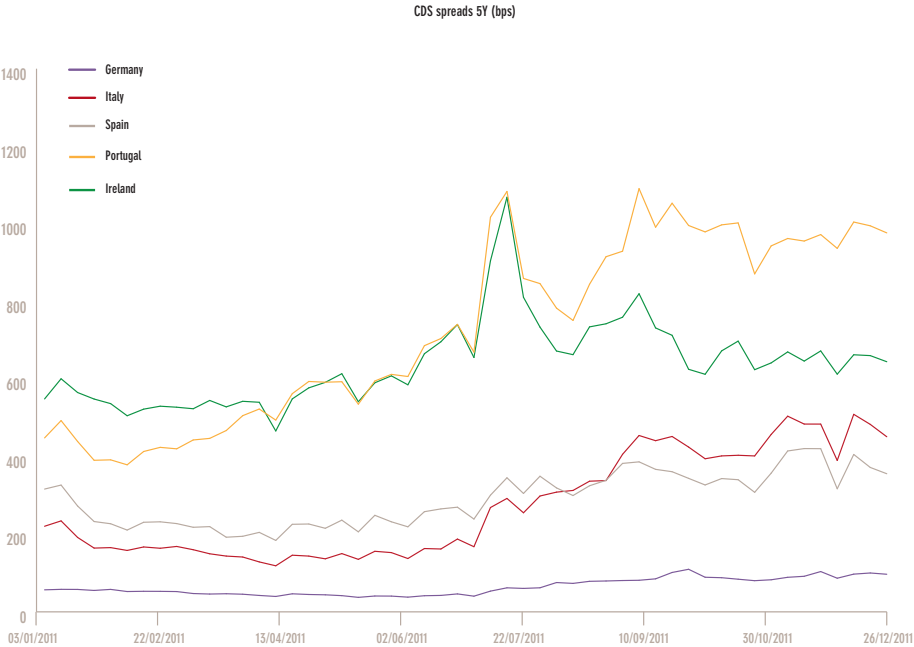
1. 2011 Year-end market conditions

The year-end close again took place within disrupted financial markets. The European stock market experienced high volatility and fell by 18% in 2011.





In the meantime, the debt securities market has been heavily impacted by the European sovereign debts crisis. Spreads have widened significantly between Eurozone countries:



In that context, financial assets impairment is still a hot topic at year-end closing, both for equity instruments and debt securities.

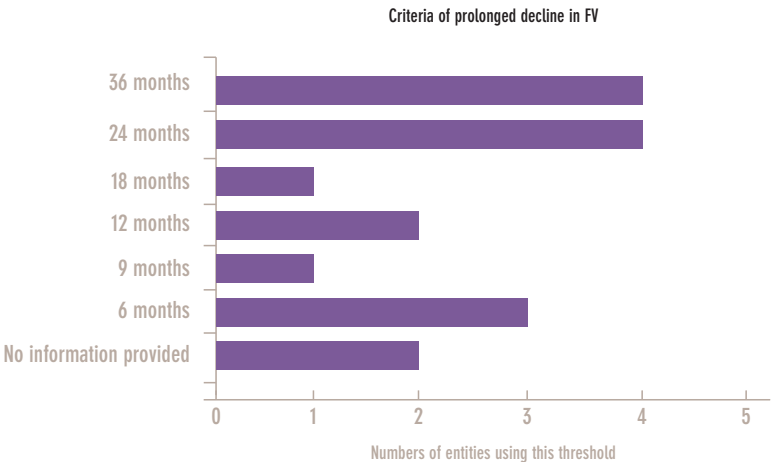
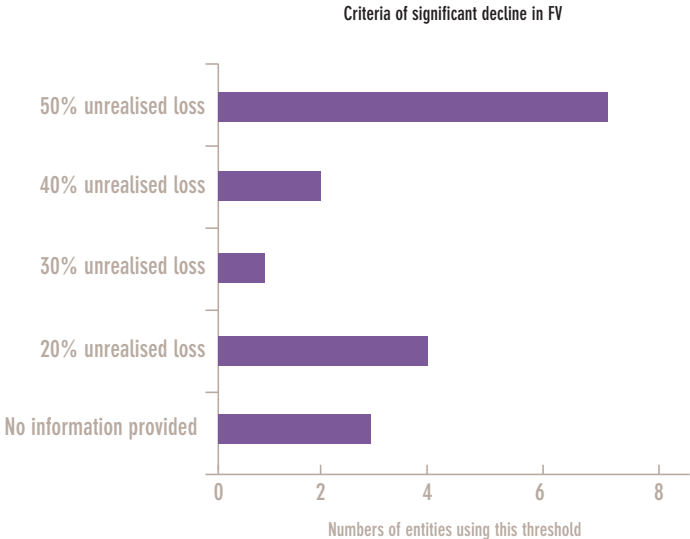
The information provided is critical for the readers of financial statements in order to understand to what extent unrealised losses have been reflected in the profit and loss account. Only a high level of transparency allows comparison of one insurance company to another. The focus of our survey on this matter was for both equity instruments and debt securities.

2. Impairment of Available For Sale (AFS) equity instruments

Since 2008, deterioration of the stocks markets has continued to strengthen the expectations of the readers of the financial statements with regards to the information disclosed related to the impairment of AFS equity instruments.

IAS 39 standard requires that an AFS equity instrument must be impaired not only in the case of significant but also in case of prolonged decline in the fair value. Thus, the prolonged decline of the stock markets led the insurers to record more impairment in 2011. Based on the information related to the groups in our study, the impairment losses for equity instruments are twice as high at the 2011 year-end than at the 2010 year-end.

The determination of the threshold determining a significant or prolonged decline is left to the discretion of management. As a consequence, the criteria used by the sample group vary:



Two groups in the sample do not disclose the threshold used as it was the case in 2010.

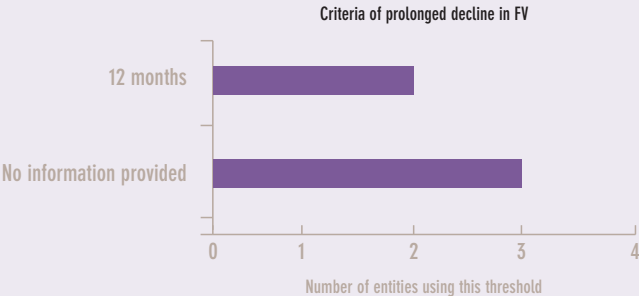
The standard does not explicitly forbid any change in the threshold from one year to another. In 2011, like in 2010, some insurers' judgement has evolved and as a consequence, this has changed their level of the threshold.

The objective of the changes in threshold made in 2010 was to extend the criteria of prolonged decline. The objective of the changes made in 2011 is to be compliant with the IFRIC recommendations regarding the definition of a prolonged decline in fair value. Two groups of our study stopped using a criterion combining a threshold of significant decline and a threshold of prolonged decline.

These two insurers did not comply with IAS 8 that requires that "an entity shall disclose the nature and amount of change in an accounting estimate that has an effect in the current period". These two groups of our study should have disclosed the impairment that would have been recorded if the impairment threshold had not been changed.

In conclusion, the impairment criteria vary from one insurer to another, restricting the comparison of the financial statements.

Impairment criteria are disclosed by the American groups in our study, but not by the Asian ones.



3. Debt securities impairment

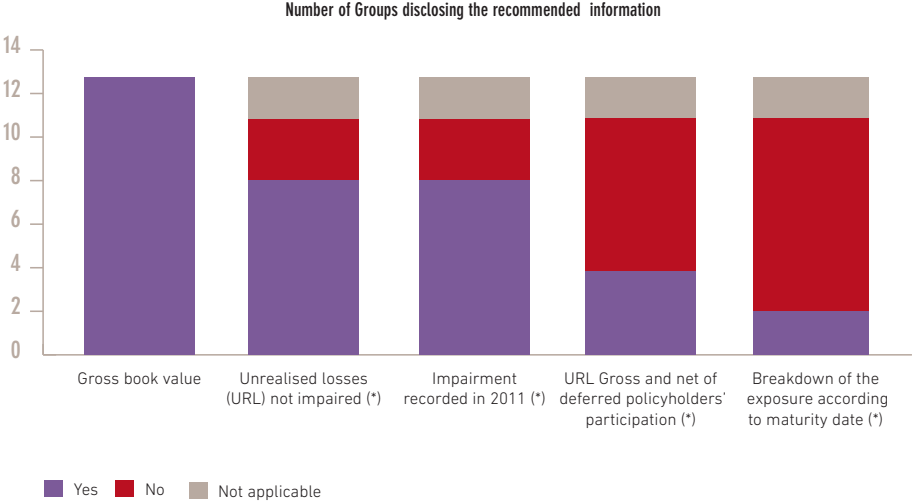
The 2011 year has been heavily impacted by the Eurozone sovereign debt crisis. The market value of certain government bonds declined significantly and the crisis in Greece constituted a major event.

As a consequence, financial statements' readers had expected disclosure regarding the insurance and reinsurance groups' exposure to sovereign debt. This context raised the following accounting issues:

- Fair value assessment in stressed markets;
- Impairment indication; and
- Impairment assessment.

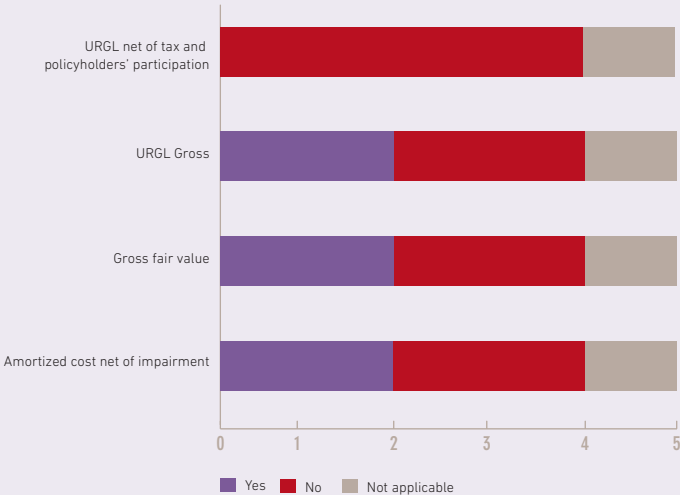
Compared to 2010, the groups in our study significantly increased the amount of information related to their exposure to sovereign debts of the countries seen as risky by ratings agencies. Our survey focuses on this information disclosed.

All of the thirteen groups in our study disclosed their gross exposure to sovereign debts where only eight did in 2010. Eight of them provided the amount of unimpaired unrealised losses (including four that disclosed the gross amounts and the amounts net of deferred tax and deferred policyholders' participation). Only two of them disclosed the breakdown of the exposure according to maturity date.



(*) Companies for which exposure to Eurozone sovereign debts is not significant are disclosed as "Not applicable"

American groups disclosed their exposure to Eurozone sovereign debts.



The Asian groups in our study did not disclose any information regarding Eurozone sovereign debt exposure. However, their exposure is not assumed to be significant.

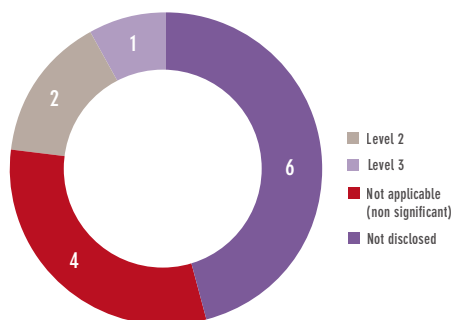
Regulators' and users of financial statements strong expectations contributed to the comparability of the information disclosed. However these expectations are not only regarding disclosure on exposure but also about the accounting treatment of the consequences of the Eurozone debt crisis.

The first accounting issue is to determine the sovereign debt fair value in the context of a stressed market. The market conditions lead some groups of our study to categorise Portugal, Italy, Ireland, Greece and Spain (PIIGS) government bonds as level 2 or level 3 investments according to IFRS 7 classification. This is critical as it impacts the potential amount of Greek sovereign debt impairment. Most of the local regulators specifically scrutinised how the insurers correctly applied IFRS principles on that matter.

In the specific case of Greek sovereign debt, many insurers considered that for 2011 half-year results the market was inactive, and as a consequence, used marked to model techniques to determine the fair value of these instruments. IASB and European Securities and Markets Authority (ESMA) firmly reacted against that practice. In November 2011, ESMA publicly stated that the market should be considered as active for most of the debt instruments and thus should not be valued using marked to model techniques.

In that context, insurance companies were under pressure for the 2011 year-end closing. However, most of the groups in our study did not disclose any specific information regarding the IFRS 7 classification of Greek sovereign debt:

Classification of Greek sovereign debt



The second accounting issue is the definition of objective evidence of sovereign debt impairment. The IAS 39 standard is not clear in this regard.

The groups in our study do not disclose in their financial statements the impairment identification process. In most cases, they only quote the standard and disclose a non-exhaustive list of the indicators used: issuer credit incident, evidenced credit risk, credit rating downgrade, disappearance of an active market, etc.

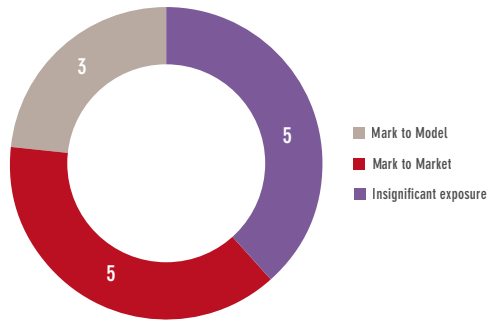
Thus, the information provided does not allow the readers of financial statements an understanding of what kind of analysis has been carried out and the criteria triggering the impairment. Yet this information is essential in the context of the Eurozone sovereign debt crisis.

Without any credit incident except for Greece, most of the groups in our study assumed there was no evidence of impairment. For specific Greek sovereign debt, all the insurers considered there was objective evidence of impairment for all maturity dates: all of the groups in our study impaired their exposure.

Regarding debt securities impairment, the third accounting issue raised by the financial crisis is the assessment of the impairment. Depending on whether or not

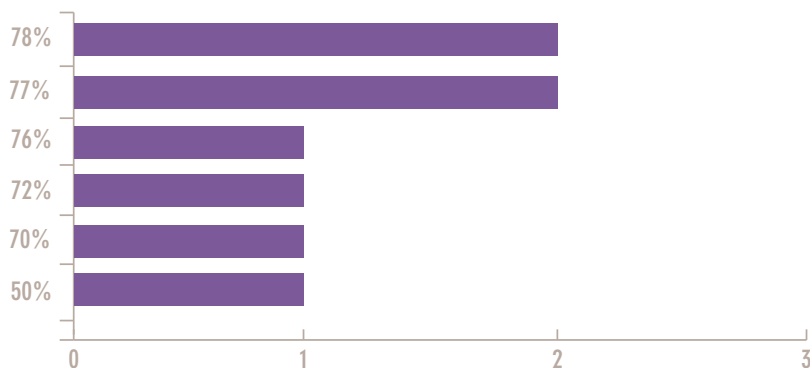
the market is considered active, mark to model can be used to assess the fair value of debt securities and therefore impact impairment losses. Most of the groups in our study that have significant exposure to Greek sovereign debt chose to use mark to market valuation as the fair value.

Valuation method on Greek sovereign debt



The mark to market valuation implies a loss from 76% to 78% where the mark to model valuations lead to impairment from 50% to 72%.

Impairment losses related to sovereign debt (% of book value)



Even if the impairment percentage of the Greek sovereign debt varies from one insurer to another, we consider that the financial statements have enough information to perform a reliable comparison of the impacts.

However, most of the insurers in our study that used mark to model valuation did not provide detailed information regarding the valuation techniques and the observable or not observable market data.

4. Deferred Policyholders' Participation Asset (DPPA)

In this section, our survey focuses on another significant impact of the financial crisis on insurers' financial statements: the deferred policyholders' participation asset.

As a reminder, the deferred policyholders' participation asset is a shadow accounting item (IFRS 4). It allows the investments' unrealised gains and losses on the policyholders' participation to be reflected. The deferred policyholders' participation becomes an asset when the overall investment portfolio is in an unrealised loss position.

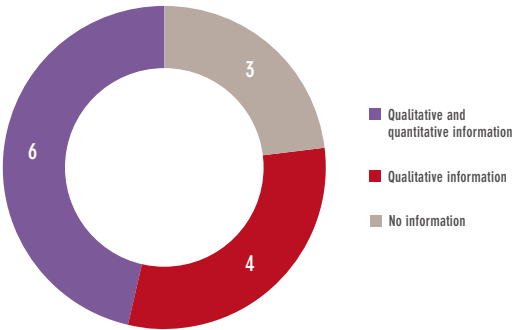
As mentioned earlier, the European stock markets fell again in 2011. As a

consequence, DPPA increased significantly compared to the previous year-end and insurance groups have been required to include disclosures on this matter. The following information was required to be disclosed by the insurance groups:

- Description of the DPPA recognised;
- Description of the accounting treatment;
- Approach used to determine the key assumptions in recording the value of the DPPA;
- Description of the factors behind the changes in amounts;
- Policyholders' behaviour assumptions; and
- Sensitivity analysis to the key assumptions.

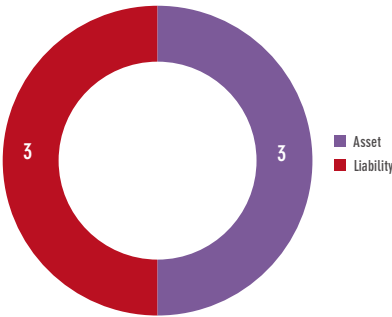
At the 2011 year-end, the information disclosed by the groups in our study varies from one insurer to another. Even if most of the insurers disclosed the principles of shadow accounting, only six of them provided detailed quantitative information. For the others, the shadow accounting impacts are included within the insurance liabilities.

Quality of the information disclosed regarding DPPA

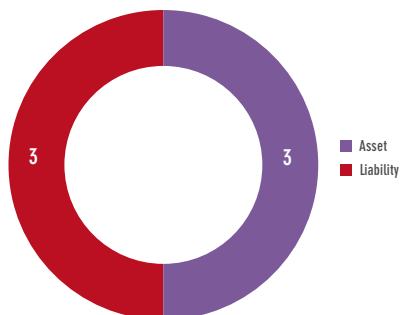


Among the few groups in our study that disclosed quantitative information regarding the DPPA, our survey focused on how the insurers presented this topic:

Deferred Policyholders' Participation presentation



Deferred Policyholders' Participation position



We noted that some of the insurers in our group presented the DPPA as a deduction of the net insurance liabilities, which is forbidden by some local regulators in Europe. Alternatively, we further noted that some insurers presented the DPPA on the asset side of the balance sheet where they have net Deferred Policyholders' Participation Liability (DPPL).

The various presentation approaches and the poor information provided restrict the comparison of the financial statements. IFRS 4 Phase 2 is expected to solve these issues.

PERFORMANCE INDICATORS

Given the difficult economic situation, the sampled insurance and reinsurance groups are struggling to convey an understanding of the profitability of their businesses in their IFRS financial statements. As a consequence, they often use other key indicators that we have identified and analysed in our survey. For life insurance businesses, embedded value remains the main communication tool and performance indicator.

This indicator is often criticised for not being correlated to the stock value of an insurance group. However, it is still relevant as:

- It remains a basic indicator to measure the profitability of Life business and the ability to generate cash;
- The closest indicator to the Solvency II economic balance sheet; and
- Most insurers use it to meet IFRS 7 requirements regarding market risk sensitivity analysis (IFRS 7 S40 and S41).

1. Definition and recent changes in the regulatory framework

Embedded value contains information showing value creation for the shareholder and includes:

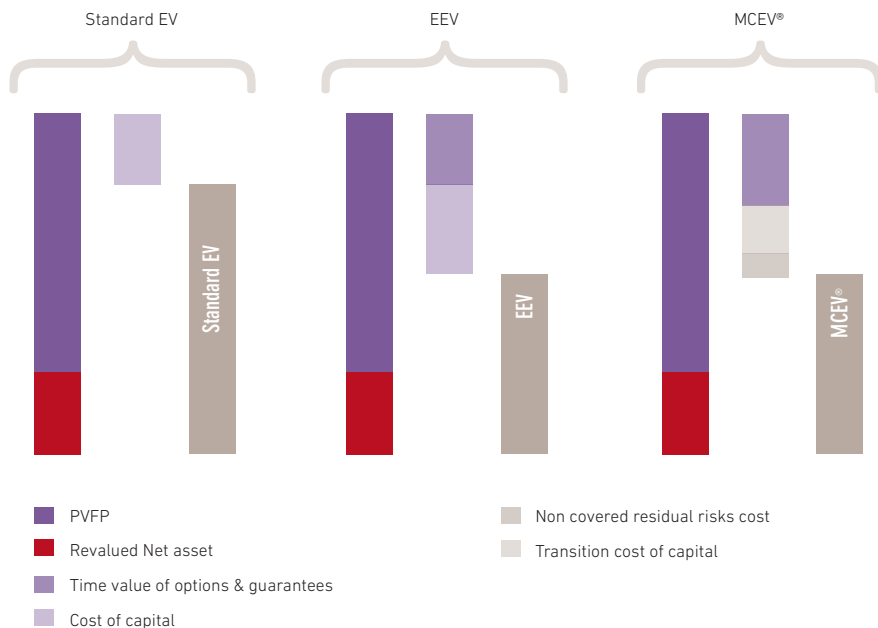
- Discounted value of future cash flows attributable to the shareholder;

- New business value; and
- Growth of available capital.

The embedded value principles involve:

- The “traditional” Embedded Value (EV), corresponding to the projection of a deterministic scenario;
- The European Embedded Value (EEV), corresponding to stochastic projections that capture assets and liabilities mismatches;
- The Market Consistent Embedded Value, corresponding to stochastic projections in a risk-free environment.

The European Embedded value (EEV) principles were released by the CFO Forum in 2006 and amended in June 2008 to introduce the principles of the Market Consistent Embedded Value (MCEV). In October 2009, the illiquidity premium concept has been implemented.

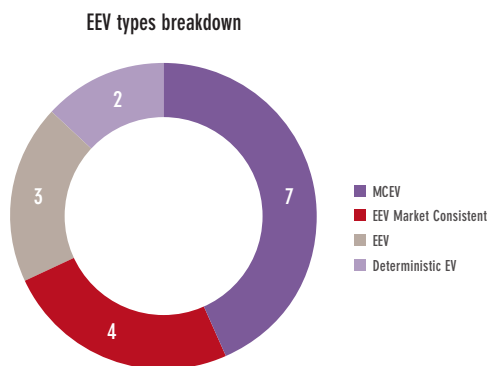


The main changes brought by the MCEV framework are:

- The use of a market consistent approach for the assessment of the time value of options and guarantees embedded in insurance portfolios, which is a similar approach to the valuation of financial instruments that have comparable cash flows; and
- The valuation of the non-covered residual risks costs (such as insurance risks) using economic capital models.

The release of the MCEV principles was accompanied by presentation templates and additional analysis (sensitivity, reconciliation charts, etc.) that aided consistency of the insurers' practices.

More than half of the sample group applies the MCEV framework. Most of the insurers that still apply the EEV framework use a market consistent approach to assess the time value of options and guarantees. The main discrepancy between the MCEV and EEV approach relates to the assessment of the cost of capital.



European insurers are not the only ones using this indicator now that it is globalised. In Asia, the insurers release “traditional” embedded value based on a deterministic approach.

The implementation of the MCEV and other market consistent approaches coincides with an unstable financial environment:

- Fall in stocks markets values and of the risk free rate combined with an increasing volatility of stocks and rates; and
- Increase in corporate and sovereign spreads.

In order to mitigate some of the impact of the financial environment since 2008, many insurance and reinsurance groups adapted their approach introducing the illiquidity premium concept (which is added to the risk free rate in order to reflect the illiquidity of certain liabilities) or adjustments to stock and rate volatility. The suitability of these adjustments was confirmed through the amendment of the MCEV principles in October 2009.

2. Assumptions and parameters comparability

Illiquidity premium

At year-end 2009, the CFO Forum allowed the use of an illiquidity premium in the computation of the MCEV. This premium impacts the discount rate used for the cash flow projections by adding a margin to the risk free rate.

Most of the groups in our study use the illiquidity premium concept. We noticed significant improvements in the comparability of the approaches used as most of the insurers are now in line with the Solvency II QIS 5 regulations:

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; $50\% \times (\text{corporate spread} - 40\text{bps})$) 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.

Source: AXA, EEV Report 2011, (p41)

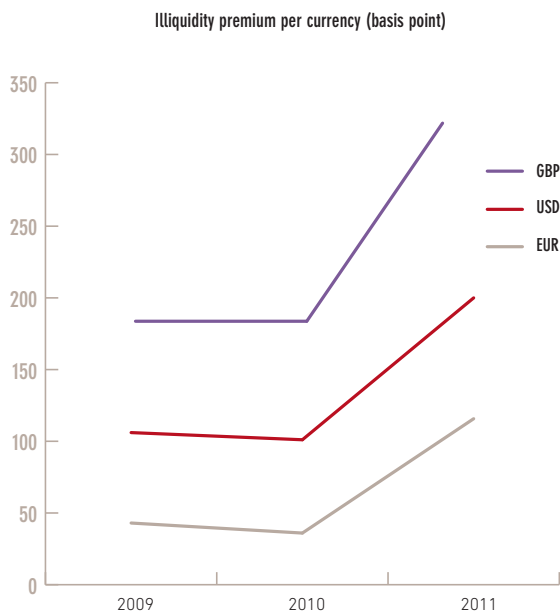
Six of the groups in our study are compliant with the QIS 5 approach (as defined hereafter), with some adjustments on a case by case basis. The CFO Forum-recommended sensitivities are not always followed. However, the Solvency II level 2 concepts have been tested by some of the groups in our study, such as the contra-cyclical premium.

As at 31 December 2011, most of the illiquidity premiums are close when comparing one insurer to another. Yet, there are some discrepancies, as for instance for the unit link products where the illiquidity premium ranges from 0% to 50%.

The disclosures regarding embedded value's sensitivity to the illiquidity premium varies from one insurer to another:

- Five groups disclosed the impact of an increase by 10 basis points;
- Two groups disclosed the impact of a zero rated premium;
- One group disclosed the contra-cyclical premium impact; and
- Four groups did not disclose any sensitivity analysis to the illiquidity premium.

The illiquidity premium increased significantly from 2010 to 2011, mitigating the impact of the worsening financial crisis.



Since 2008, we noted significant improvements in the comparability of the information provided. The groups in our study now have similar approaches for their financial assumptions. In particular, they have a similar appreciation of the illiquidity premium, being the item with the more significant impact.

Equity and bond market volatility lead some of the insurers in our group to make the following adjustments:

- No illiquidity premium on Italian, Spain and Portugal rate curves; and
- Disclosure on the contra-cyclical premium impact, including the impact on the sovereign debts.

Examples:

5.1.5 Economic assumptions for Italy, Portugal and Spain

The values used to determine the initial yield curve at 31/12/2011 for the Italy, Portugal and Spain region are the state borrowing rates at 31/12/2011. No liquidity premium was added to these reference curves.

Reference curve	1 year	2 years	5 years	10 years	20 years
MCEV [®] 31/12/2011 - Italy	4.64%	5.08%	6.11%	6.87%	7.08%
MCEV [®] 31/12/2011 - Portugal	15.22%	15.90%	16.55%	14.19%	9.26%
MCEV [®] 31/12/2011 - Spain	3.21%	3.47%	4.26%	5.49%	6.30%

Source: CNP Assurances, EEV Report 2011 (p 27)

VIF Sensitivity to Government Spread Premium (€ mln)

	Base	with GSP	Change
Italy	-789	1,398	2,187
Germany	2,641	3,610	969
France	1,212	2,503	1,291
Central Eastern Europe	823	823	0
Rest of Europe	2,367	2,894	526
Rest of World	1,978	1,978	0
Total	8,233	13,207	4,974

Source: Generali, 2011 Life EV Supplementary Information, (p 24)

Required capital and Free Surplus

Free surplus is the amount in excess of the required capital. Depending on the market participants, the free surplus corresponds to:

- Compliance with regulatory requirements;
- Minimum financial strength rating; and
- Economic capital.

More precisely, the groups in our study had the following approaches:

- Five groups are referring to a percentage of the regulatory requirements;
- One insurer saw the required capital as corresponding to maintaining a certain financial strength rating;
- One insurer referred to economic capital; and
- Two groups in our study defined free surplus as the higher of the regulatory requirements, the economic capital and a minimum financial strength rating.

As a consequence the free surplus is not a reliable indicator for comparison of insurance groups. It can be negative in some cases where the capital requirement is more seen as an internal objective as opposed to a regulatory constraint.

3. The impacts of the Solvency II framework

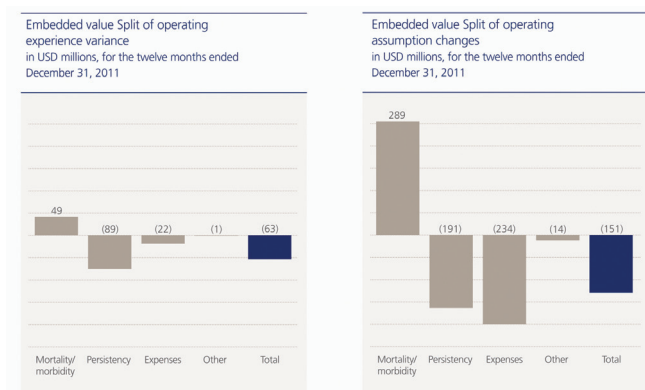
For three years, the groups in our study experienced a high volatility of the embedded value: an average of +27%, +15% and -10% for 2009, 2010 and 2011, respectively.

This volatility reflects market conditions: the impact is a 20% decrease of embedded value and a 50% decrease of the value in force.

Insurer	% VIF	Economic assumptions impact	
			% EV
A	43%		24%
B	89%		37%
C	63%		30%
E	17%		7%
F	16%		8%
J	63%		15%
Average	49%		20%

The volatility experienced on the embedded value is an early indication of what will happen to life insurers' prudential balance sheets. The best estimate computation of insurance liabilities is similar to the embedded value approach.

In terms of information disclosed by the groups in our study, some of the analysis produced is compliant with the Solvency II risk classification:



Source: Zurich Financial Services Group, Rapport de gestion 2011, p294

4. Insurance companies' market capitalisation

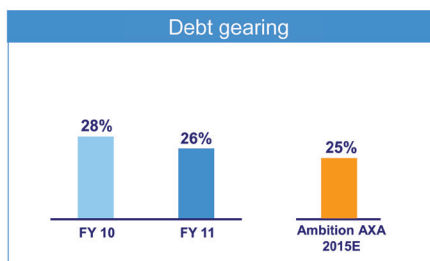
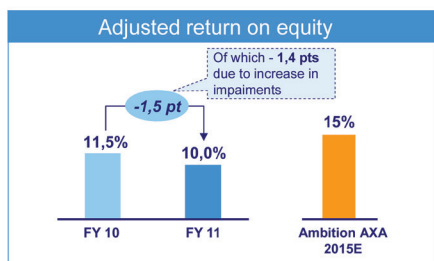
The survey also focuses on how the embedded value is perceived by the market and how it impacts the insurance companies' market capitalisations. In 2010 and 2011, market capitalisation of insurers is lower than embedded value. Yet, embedded value does not take into account future new business.

Insurer	Mkt cap to EV 2010	Mkt cap to EV 2011	Change (%)
A	0,85	0,75	-11%
B	0,80	0,76	-5%
C	0,68	0,62	-9%
D	0,64	0,73	15%
E	0,66	0,48	-28%
F	0,42	0,29	-32%
G	0,49	0,44	-11%
H	0,93	0,88	-6%
Average	0,68	0,62	-10%
Standard deviation	0,67	0,68	0%

The market capitalisation to EV ratio standard deviation indicates that there is no clear correlation between the market capitalisation and the EV. However, it seems that when the EV decreases, market capitalisation also decreases in a similar proportion.

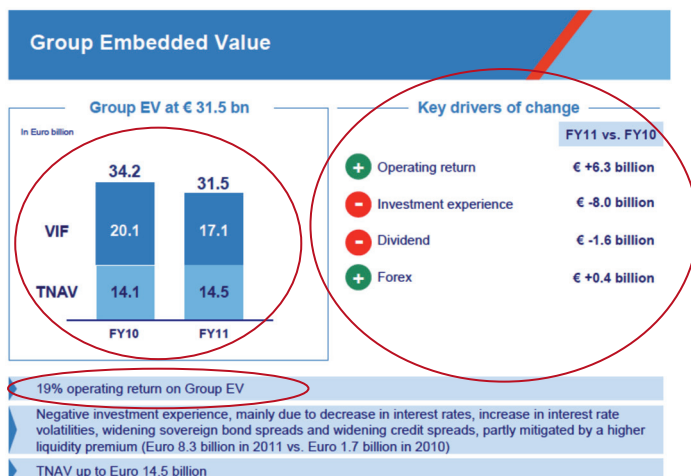
5. The EV position in the financial communication

Embedded value still plays a large part in the insurance groups' annual result presentation, but it is now supplemented by more classical indicators such as return on equity or debt gearing.



Source: AXA, 2011 Annual Results Presentation, p8

The disclosure related to EV is now focused on value, change and return of EV:



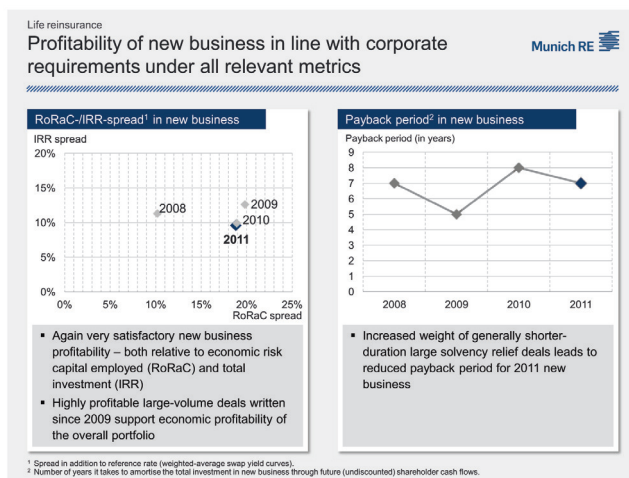
Source: AXA, 2011 Annual Results Presentation, p44

In our opinion, this trend can be explained by several factors:

- The inherent complexity of EV, requiring simplification;
- The disclosure around the EV is supported by a dedicated report that can sometimes be integrated into the annual report.

EV related indicators we pointed out last year are still present:

- Internal Rate of Return for new business; and
- Payback period corresponding to the amount of time taken for the available cash-flows to equal the capital invested.



Source: Munich Re, Investor conference 2011, p43

These indicators are not helping in improving the understanding of the performance of a life insurance company. They increase the volume and complexity of the information disclosed which has the same disadvantage of EV in terms of volatility and comparability.

6. Conclusion

Consistency of the EV related information from one insurer to another is improving. This is due to the growing influence of:

- The CFO Forum principles; and
- The Solvency II framework, even if this framework is not finalised.

However, we noticed that the market hardly takes into consideration EV in the valuation of insurance and reinsurance groups. This issue will have to be addressed by the groups' disclosures as the Solvency II framework is based on a similar approach.

SOLVENCY MEASUREMENT AND CAPITAL MANAGEMENT

1. Introduction

Since the beginning of the financial crisis, investors and analysts have scrutinised the capital of large insurance groups. In the context of deep-rooted changes in the regulatory framework and disruption of the debt markets, there are considerable concerns regarding both the adequacy and management of capital.

The financial crisis highlighted the limitations of the solvency margin ratio under the Solvency I framework. This ratio does not capture all the risks borne by insurance companies such as financial risks.

The Solvency II framework brings complexity into capital management and solvency margin assessment. The Solvency II approach is based on the quantitative assessment of risk by using prospective models.

At the same time, classic indicators such as capital profitability have been introduced into insurers' financial disclosures. These indicators are not specific to insurance business, but they are much more accessible to the investor community.

During the financial crisis, the Solvency I ratio was under scrutiny. The limitations of this ratio have been evidenced, notably its inability to capture all the risks undertaken by an insurance company such as financial risks.

With Solvency II, capital management and solvency ratio assessment become more complex as the objective is to capture all kind of risks by using sophisticated models.

Therefore, capital management is now at the heart of insurers' financial disclosure

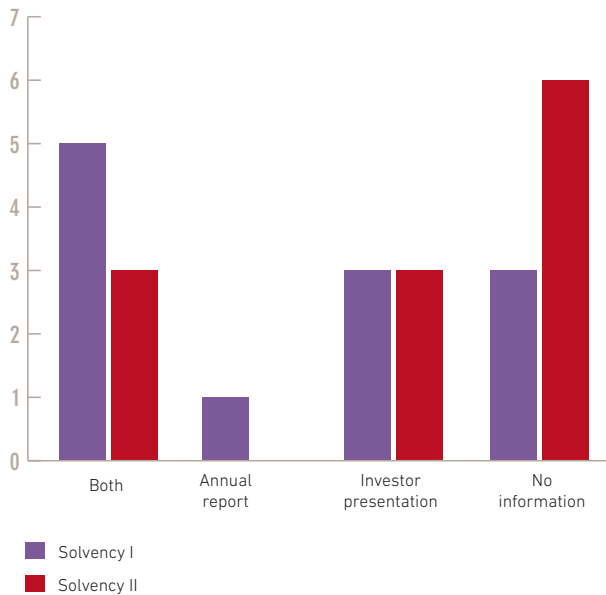
and this is extensively described in their annual reports.

Our survey focused on the following aspects of capital management:

- Nature of the qualitative information disclosed;
- Nature of quantitative disclosures; and
- Indicators selected to measure the efficiency of capital management.

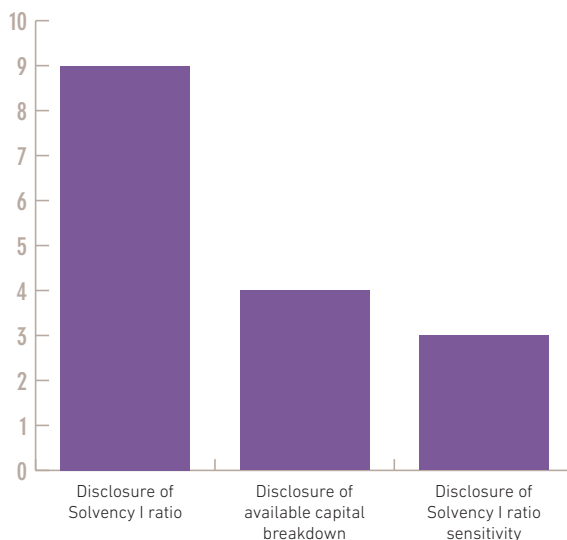
2. The nature of the qualitative information disclosed

One of the first findings of our survey is that information regarding the transition to Solvency II and capital models is spread among many financial disclosure documents: the annual report, presentation of annual results to the analysts, papers distributed during investors' seminars etc.



Solvency I

The disclosures relating to Solvency I are focused only on the solvency ratio. This ratio is considered to be essential because of its simplicity and credibility:



All the European insurers in our study disclosed the Solvency I ratio. Half of them disclosed the available capital breakdown and some of them carried out sensitivity tests on the solvency ratio.

Solvency II

All the European insurers in our study disclosed qualitative and quantitative information related to the Solvency II directive.

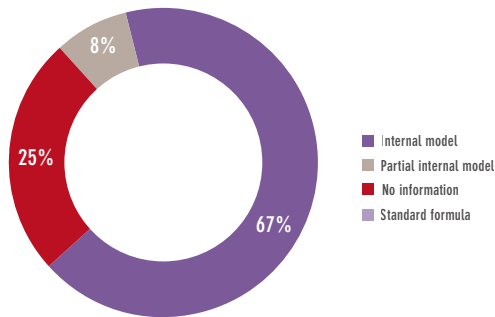
The qualitative information is mainly concentrated in the annual report. This describes the implications of the Solvency II framework implementation and the related operational impacts, such as:

- Description of level 2 implementation measures;

- Description of Solvency II project management and status; and
- Status of discussions with the local regulator regarding the internal model approval.

Regarding the quantitative information, we noticed that in some cases, it is difficult to assess whether the groups in our study are using internal model, partial internal model or the standard formula. According to the information gathered, most are implementing an internal model:

Standard model vs. internal model



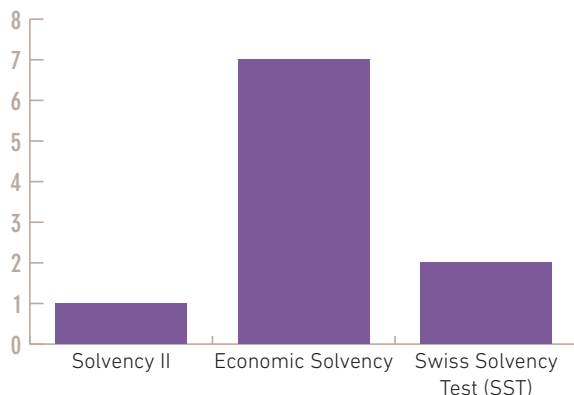
The majority of insurers that have an internal model disclosed the following:

- The current implementation of the model for the purpose of asset and liability management; and
- Status of discussions with the local regulator regarding the pre-approval process.

Few of the insurers provided:

- Figures per risks, geographical areas, etc.;
- Approaches and assumptions for each risk; and
- Sensitivity analysis.

Only one group in our study disclosed what the solvency ratio under Solvency II would be, which is understandable given the uncertainties regarding the final calibration of the model.



Economic capital

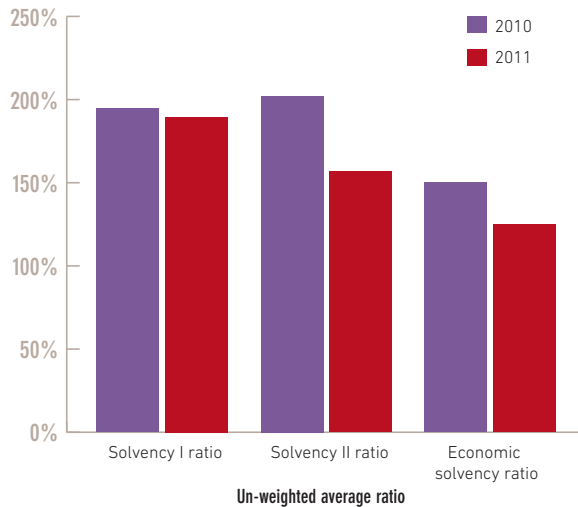
The majority of the groups in our study provided commentary on economic capital management. Seven of them disclosed their economic capital solvency ratio. However, the economic capital assessment approach is not always provided:

- Some of the insurers used a quartile different from the Solvency II approach (being 99.5%);
- Among those that disclosed the quartile used, none provided the conceptual discrepancies between the economic capital and Solvency II. Only five groups in our study disclosed information consistent with the Solvency II framework.

As a consequence, the information provided is different and cannot be easily compared. This situation should improve with the implementation of the Pillar 3 requirements.

3. Quantitative information comparison

Our survey focused on the un-weighted and average solvency ratio of the groups in our study:

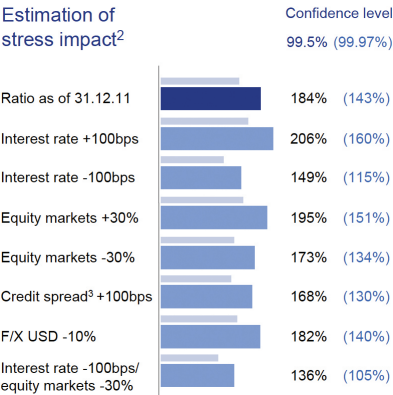
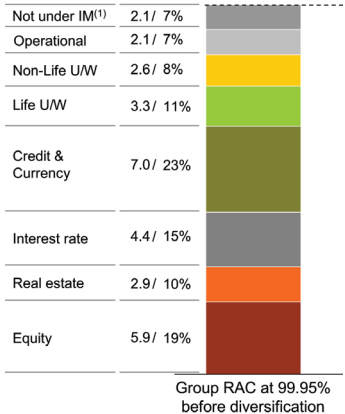


This confirmed that the volatility is higher with the Solvency II and economic capital ratios than with the Solvency I ratio. However, little information is available regarding the sources of this volatility, notably:

- Change in modelling impacts;
- Change in assumptions impacts; and
- Change in scope.

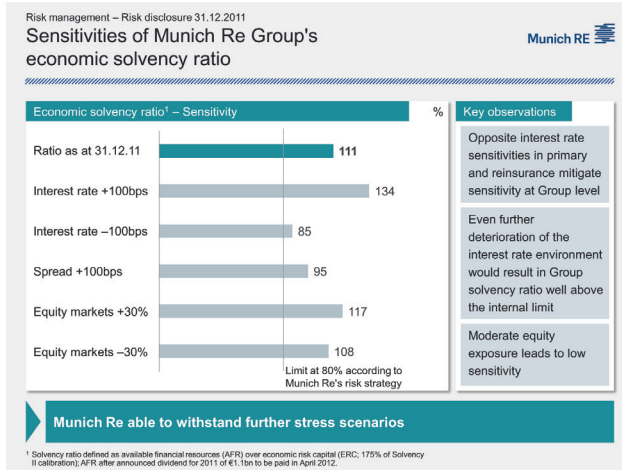
In the Solvency II framework implementation context, we noticed that economic capital solvency ratios are satisfactory (150% on average) most of the time. However, the level of compliance of those models with the final framework will have to be confirmed. Thus, it is too early to anticipate the Solvency II ratios of the groups in our study for the 2013 year-end.

The disclosures regarding the sensitivity of the economic capital model and their integration in the assets and liabilities management process are useful information for investors and regulators alike. In the most extensive annual reports; economic capital sensitivity analysis, risk weighting and diversification impacts are a relevant source of information for the readers to understand insurers' exposures.



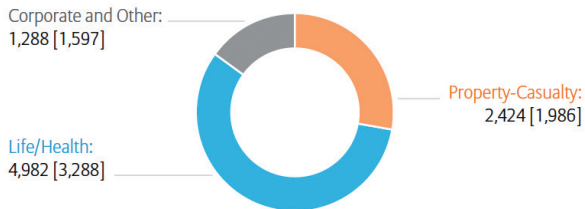
Source: Generali, Annual results presentation, p91

Source: Allianz, Investor conference, pB-9



Source: Munich Re, Investor conference, p41

Total Group internal credit risk capital: 8,694 [6,871]
Share of total Group internal risk capital: 17.4% [15.2%]

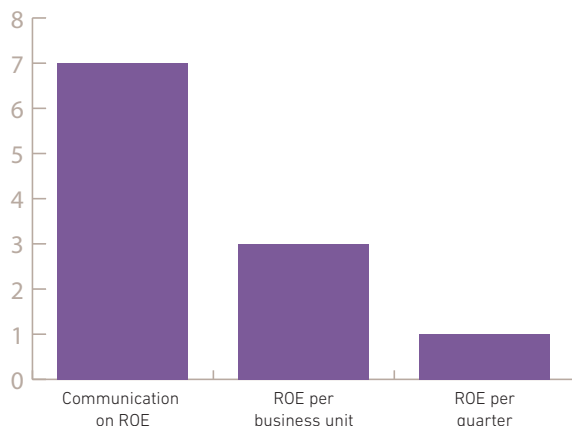


Source: Allianz, Annual Report 2011, p164

We noticed that the quantity of information provided through the annual report and the annual result presentations, etc., is significantly increasing. For some insurers in our study, there is still a long way to go before complying with Solvency II requirements.

4. Capital management efficiency indicators

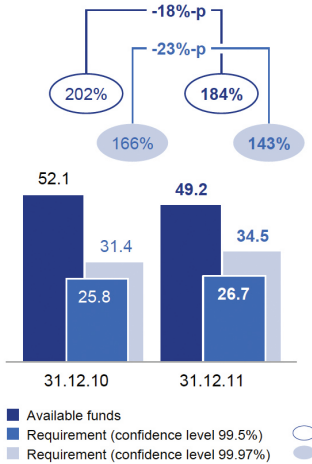
Economic capital disclosures allow the insurance groups to elaborate on the employment of capital. They are now able to disclose detailed Return on Equity (ROE):



However, the consistency between return on economic capital and management strategy is difficult to establish and this does not lead to specific disclosures.

Other indicators are also disclosed such as the projection of the expected cash flows:

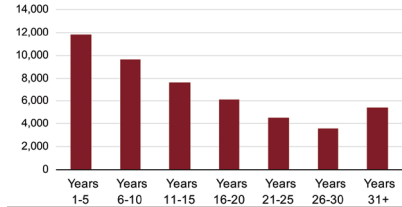
Economic solvency¹ (EUR bn)



Source: Allianz, Investor conference, pB-9

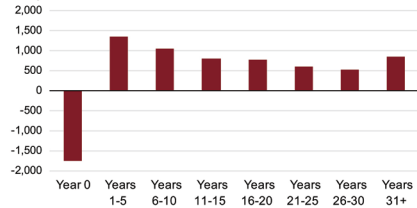
2011 Inforce

Expected undiscounted cash flows



2011 New Business

Expected undiscounted cash flows



Source: Generali, Annual result presentation, p89

5. Conclusion

Disclosure regarding capital management and profitability is a challenging exercise for insurance groups. The basis for disclosure is either an unsatisfactory framework (such as IFRS that has unable to capture the nuances of insurance) or not finalised (such as the economic capital concept or Solvency II).

The use of basic profitability indicators or disclosing economic capital information is a good start in order to address that challenge but there is still a long way to go before insurance companies will be able to address the concerns about on-going change in regulations.

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Mazars is present on five continents

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