THE AREAS OF GREATEST SUBJECTIVITY AND INTEREST WITHIN THE IFRS FINANCIAL STATEMENTS OF LARGE EUROPEAN INSURANCE GROUPS

AT 31 DECEMBER 2012

Mazars Insight
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INTRODUCTION

The accounts of insurance entities for the year ended 31 December 2012 were prepared against an ongoing background of economic crisis, characterised by:

- continuing weak growth in the major world economies;
- low interest rates;
- persistently volatile markets.

European insurers nevertheless benefited in 2012 from some encouraging signs in the financial markets, illustrated by:

- a relaxation in the sovereign debt market together with the measures taken by the European Central Bank and policy makers;
- good global equity market performance.

Since the beginning of the financial crisis in 2008, analysts and investors have had higher expectations of financial information due to the problems of determining the exposure of insurers to economic difficulties and how they perform under situations of ongoing stress.

We have analysed the financial disclosures of a sample of European insurers and re-insurers on the basis of their annual reports and their financial reporting material for the year ended 31 December 2012.

The analysis simultaneously addresses:

- accounting issues, when we consider the application of international accounting standards in areas that we perceive as sensitive;
- financial and regulatory aspects, where we extend the scope of analysis to financial communication on performance indicators and capital management.

This year we have focused on the following topics:

- disclosures on goodwill and the impairment tests and disclosures associated with other intangible assets;
- insurers’ communication on financial instruments, including derivative instruments, and the associated issues in a still-difficult market environment;
- deferred tax assets and the disclosures required on assets of this type and their recoverability;
- communication on Embedded Value and the main performance indicators;
- disclosures on capital management against a background of regulatory reform.

We have sought to shed light on the comparability, comprehensibility and relevance of disclosures, both under IFRSs and the other reporting frameworks to which our analysis will refer.
Mazars has analysed the annual reports and financial communication published for the year ended 31 December 2012 by 16 European insurance and re-insurance groups publishing their accounts under IFRSs:

Since last years’ study, the sample has been enlarged by the addition of three new entities: Ageas, Prudential and Legal & General. This sample is smaller where certain groups are unaffected by some of the topics discussed.

We have also conducted an analysis of some non-European groups where this seemed appropriate: AIA (Hong Kong), Great Eastern (Singapore), QBE (Australia), MetLife and Prudential (USA). These analyses can be found in the boxes coloured grey.

Our sample includes the majority of players recently identified by a G20 committee as representing a risk to the world financial system: Allianz, AXA, Generali, Aviva and Prudential.

We illustrate our analysis of these topics by extracts from reference materials and annual reports issued by the sample entities.
1. GOODWILL AND OTHER INTANGIBLE ASSETS: RECOVERABILITY TESTING AND DISCLOSURES
Against a background of ongoing economic crisis, we have chosen to begin our analysis by considering goodwill and, in particular, disclosures on its recoverability in accordance with IAS 36. We have covered this topic for several reasons:

- the margins achieved by our sample on life insurance in the ‘traditional’ markets remain weak in 2012, against an unfavourable background;
- the problematic environment described above is here for the long term;
- this item on the financial statements is always a key concern for market regulators and investors.

1.1. The impact of the economic and financial environment on changes to goodwill and its recoverability

Before the financial crisis, the insurance sector in Europe had experienced a high rate of mergers and acquisitions. This steep rise in transactions significantly increased the amount of goodwill recognised as an asset in financial statements (+ €15 billion, +40%, during the period 2005-2008).

The financial crisis which occurred in 2008 and the accompanying a collapse in the financial markets, developed into a deeper and more lasting economic problem.

1.1.1. A few statistics

In our sample, the gross amount of goodwill (before impairment) has declined over the last two years. This fall can be explained by disposals of assets which exceed new acquisitions over the period.
In parallel, equity has grown. This is partly due to the annual results but also to the recovery in the financial markets recorded in 2012.

Tightening credit spreads on sovereign debt has had a positive impact on insurers’ revaluation reserves. Despite everything, the proportion of goodwill in equity remains significant, with an average goodwill to equity ratio which is still high (21% at the end of 2012), as can be seen in the chart opposite. The standard deviation of this ratio is also high, reflecting:

- diverse ratios from one insurer to another, due to their different development strategies;
- and the different degrees of sensitivity of equity to market variations.
1. Goodwill and other intangible assets: recoverability testing and disclosures

Further, the analysis of variations in gross goodwill and impairment by geographical area (below) is consistent with the strategic directions taken by the major European insurers: new goodwill is being generated on acquisitions in emerging countries (South America), while asset disposals and impairments over the year mainly affect Europe and North America.
1. Goodwill and other intangible assets: recoverability testing and disclosures

Geographical distribution of changes in goodwill

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>Acquisition</th>
<th>Disposal</th>
<th>Impairment charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>201</td>
<td>668</td>
<td>1176</td>
</tr>
<tr>
<td>North America</td>
<td>31</td>
<td>13</td>
<td>1074</td>
</tr>
<tr>
<td>South America</td>
<td>0</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Middle East</td>
<td>0</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>Asia</td>
<td>169</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>34</td>
<td>0</td>
</tr>
</tbody>
</table>

In their financial communication, many insurers stress their ‘agility’ in the redirection of capital towards rapidly growing countries with high margins.

The chart above also demonstrates a weak volume of transactions, reflecting the wait-and-see approach of the sector during a time of continuing economic, financial and regulatory uncertainties.
1. Goodwill and other intangible assets: recoverability testing and disclosures

1.1.2. Reduced headroom

Forecasts of future margins used to justify goodwill have been particularly hit by historically low interest rates and weak growth prospects.

The value in use of investments is declining, which has led some groups to record significant impairments. In 2011, we observed a sharp rise in impairments across the sample, reflecting an erosion of headroom for insurers to justify the recoverability of goodwill. The level of impairment recorded at the end of 2012 confirms the sensitivity of these tests to the ongoing economic crisis.

The main consequences of this crisis environment are as follows:

- goodwill impairment testing remains a sensitive subject in annual financial statements and financial communication;
- the market is paying increasing attention to disclosures about the impairment testing conducted on investments which enable it to understand the assumptions used, calculation methods and headroom via sensitivity analyses;
- the recurrent and significant nature of accounting losses makes the predictability of future impacts an essential subject for user of accounts.
1. Goodwill and other intangible assets: recoverability testing and disclosures

1.2. Are the disclosures provided on impairment tests and their sensitivity to the key assumptions sufficiently relevant?

Our survey has been conducted with a view to investigating compliance with the basic principles of IAS 36, but also to analysing information disclosed by insurers regarding goodwill impairment testing and sensitivity tests.

Against the background we have described, investors and market regulators now expect increased transparency and better financial disclosures on impairment tests and their sensitivity.

The chart below presents the results of our analysis of the reporting requirements of IAS 36. The level of disclosures provided in 2012 regarding impairment testing is similar to that of the previous reporting period, which in turn saw a general improvement on 2010.
Although the requirements of the standard are respected overall, some entities do not give all the information required. There is still wide diversity in the methodologies, the level of detail provided and the values allocated to the key assumptions.

We have extended our analysis of sensitivity testing, which is a subject close to the hearts of the regulators who have this year once again issued recommendations on the disclosures required for these tests.

According to paragraph 134(f) of IAS 36, an entity must disclose a sensitivity analysis if a reasonably possible change in a key assumption, on which management has based its determination of the recoverable amount of a cash generating unit (CGU), would cause its carrying amount to exceed its recoverable amount.

The overall level of disclosures on sensitivity analyses is down in comparison with 2011.

**Entities which have impaired goodwill or are subject to IAS 36.134**

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exact information about sensitivity tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes applied to key assumptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of key assumption for which recoverable amount = carrying amount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantified data on recoverable value (or impairment) following changes to assumptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoverable amount exceeding carrying amount</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Chart showing percentage of entities which have impaired goodwill or are subject to IAS 36.134](chart.png)
Entities covered by IAS 36.134 are mainly content to disclose the changes made to the key assumptions. While there is little headroom on these tests, and given the pressure applied by regulators, the level of disclosures available are inadequate to meet the demands of the standard.

The discount rate is the key assumption most frequently amended as a result of sensitivity tests. Three insurers, down from six in 2011, have used models that amend a combination of assumptions, as recommended by regulators.
1. Goodwill and other intangible assets: recoverability testing and disclosures

The presentation of sensitivities using scenarios for changes in all the key assumptions is good practice for informing the users of financial statements, where these assumptions appear to be correlated. We have picked out this example of presentation of the results of sensitivity testing:

Based on the sensitivity analysis with regard to the assumptions, the goodwill for Millenniumbcp Ageas will still not be impaired if the growth rate would drop by 2.6 percent points or the discount rate would increase by 2.0 percent points. The outcome of the test is also sensitive to the target solvency margin. If the target solvency margin is set at 125% which is in line with the Portuguese market the discount rate could increase to 14.5% before the goodwill is impaired.

Source: Ageas, Annual report 2012

Although the use of scenarios considering changes in several key parameters when carrying out sensitivity tests seems to be good practice, it is complex and can produce results which are difficult to interpret.
1.3. Disclosures on other intangible assets

In 2012, we have extended our survey to other intangible assets. At 31 December 2012, these assets represented more than 40% of equity for insurers in our sample, as the following chart shows. This is a higher proportion than goodwill.
A large part of the decline in the proportion of these assets between 2011 and 2012 is due to the disappearance of the Deferred Participation Asset (DPA) associated with the strong performance of equity markets, as well as the tightening of credit spreads by some European sovereign issuers to which the entities in our sample have significant exposure.

As in the case of goodwill, the recoverability of these assets is of crucial interest to investors. The analysis of annual reports issued by the entities in our sample enabled us to establish whether all the asset types presented in the graphic above are subjected to an annual impairment test as required by the standard. This last point is either specific to the asset concerned (as for distribution agreements or portfolio values) or conducted through a liability adequacy test in compliance with IFRS 4 (this is the case for the DPA).

However, the level of disclosures fails to highlight the headroom on these assets. While at the same time the potential effects of risk-pooling, allowed by IAS 36 when impairment testing goodwill at CGU level, are not possible for these assets which must be tested more closely and at entity level.
1. Goodwill and other intangible assets: recoverability testing and disclosures

Given their significant weight in the financial statements of insurers, although there is compliance with the standard the disclosures do not enable users to understand insurers’ headroom for the recoverability of these assets.

Conclusion

The disclosures provided by European insurers meet the majority of the requirements of IAS 36, though there is still scope for improvement, particularly with respect to sensitivity analyses and the justification of assumptions. The quality and accuracy of the information remains varied, which makes it difficult to compare entities.

This year once again, we have observed a reduction in headroom resulting in significant impairments and the first effects of the strategic shifts taken by the major European insurance groups in terms of investment.

These groups continue to be exposed to risks which could further impact their forecasts and the other assumptions used in the valuation of their activities. Therefore, goodwill impairment tests and their sensitivity are subjects of keen interest to regulators and users of accounts seeking a clearer vision of the predictability of future accounting impacts.
2. ACCOUNTING FOR FINANCIAL ASSETS

2.1. End-2012 market conditions

As mentioned in the Introduction, in 2012 European insurers enjoyed more favourable market conditions than in 2011, though volatility remained high. The sound performance of equity markets was accompanied by tightening credit spreads on corporate bonds and on sovereign debt. These developments are illustrated in the following three charts:
The most striking tightening of spreads was seen for Italian sovereign debt, to which the insurers in our sample have significant exposure.

Despite the more favourable background, market regulators have maintained their requirements for disclosures in a published recommendation, particularly in the case of sovereign debt. The impairment of financial assets is always at the heart of the annual reporting process.

The disclosures provided are essential to enable users of accounts to understand how far unrealised losses are reflected in the results posted by insurance and re-insurance entities. Only if there is a high degree of transparency on the impairment rules used can entities be compared. We have focused on this aspect, distinguishing the rules applicable to equity instruments and those applied to debt instruments.
2.2. Impairment of equity instruments classified as available for sale

The period between 2008 and 2011 was marked by a significant downward trend on most equity markets. This prolonged trend contributed to significant impairments by European insurers until the end of the 2011 reporting period. In 2012, the level of impairment charge recorded was down in comparison with 2011 and reflects the improved performance of equity markets, as the chart below illustrates:

![Impairment charge chart]

The level recorded remains high, feeding the expectations of users of accounts regarding disclosures on the impairment rules applied to equity instruments.
2. Accounting for financial assets

Under IAS 39, an equity instrument must be impaired in the event of ‘significant or prolonged’ decline in fair value. Nonetheless, determining the criteria for impairment is left to the judgement of management, thus providing a source of diversity which in 2012 has again led to the adoption of significantly differing criteria:

<table>
<thead>
<tr>
<th>Criterion for ‘prolonged’ decline in fair value</th>
<th>Criterion for ‘significant’ decline in fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 months</td>
<td>50% loss in value</td>
</tr>
<tr>
<td>24 months</td>
<td>40% loss in value</td>
</tr>
<tr>
<td>18 months</td>
<td>30% loss in value</td>
</tr>
<tr>
<td>12 months</td>
<td>25% loss in value</td>
</tr>
<tr>
<td>9 months</td>
<td>20% loss in value</td>
</tr>
<tr>
<td>6 months</td>
<td>No information</td>
</tr>
<tr>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

Number of entities applying criterion

Nor does the standard explicitly exclude changes to these criteria over time. As happens every year, at least one entity’s judgement has changed, with a corresponding shift in the criteria applied. In 2012, one entity has adopted the criteria of 30% or 12 months, compared with 50% or 36 months in 2011. This entity has complied with the provisions of IAS 8 by disclosing “the nature and amount of any changed estimates with an impact on the period in question” and indicating the amount of impairment which would have been recognised if the criteria had remained unchanged.

In conclusion, the diversity of methods used limits the comparability of entities.
Focus on Asia / US / Australia

Disclosures on impairment criteria are provided in the financial statements of American entities, but not in those of Asian and Australian insurers.

Neither of the two US entities has changed its criteria. One of them uses a mixed criterion of 20% over 6 consecutive months (this was already the case in 2011).
2.3. Impairment of debt securities, particularly sovereign debt

The tightening of credit spreads for the majority of sovereign issuers, particularly in the peripheral European countries, has reduced the criticality of the accounting issues raised by these instruments.

The main impacts on the accounts are:

- an increase in the revaluation reserve accounted for in equity;
- a reduction in gross impairments:

Despite this improvement, market supervisors have maintained their stringent requirements for disclosures in the annual reports regarding the exposure of insurance and re-insurance entities to sovereign debt and the associated accounting issues such as:

- the determination of fair value under potentially atypical market conditions;
- triggering impairment;
- the amount of impairment.
National regulators supported the position taken in July 2012 of the European Securities and Markets Authority (ESMA) on the presentation of the risk of Greek sovereign debt at end-2011. The recommendations issued as an example by the French Financial Markets Authority (AMF) at the end of 2012 tended to boost requirements for and expectations of disclosures on exposure to the sovereign debt in countries regarded as at risk.

The benchmark for disclosures where possible improvements have been identified shows that the level of information is diverse, and still in need of improvement in many cases:

Number of entities disclosing the recommended information

(*) Companies for which exposure to PIIGS sovereign debts is not significant are presented under 'N/A'
Among the market regulators’ recommendations, there are three subjects on which most insurers give no information:

- the classification of sovereign debt by fair value level as defined by IAS 39;
- quantified information on the impact of profit-sharing and the impact of tax on unrealised losses;
- the breakdown of contractual repayment flows by maturity date.

We may conclude that the level of disclosures available on financial instruments, and more particularly on sovereign debt instruments, has not reached the levels required by regulators. Nonetheless, at the end of the 2012 reporting period, market conditions contributed to reduce the importance of these disclosures.

American insurers have also made disclosures about their exposure to European sovereign debt issued by countries in difficulty, as they did in 2011. Note also that these entities have slightly reduced their exposure to sovereign debt. However, Asian and Australian insurers have made no disclosures on this subject, as their exposure is less significant.
3. DERIVATIVE INSTRUMENTS
This year our analysis includes a review of insurers’ practices with respect to disclosures on derivative instruments. These instruments are a topical issue, not least with the arrival of the EMIR - the Europe Market Infrastructure Regulation.

### 3.1. Background

Insurers have increasing recourse to these instruments as part of their financial risk management, reflected by a steady rise in notional amounts in recent years, as illustrated by the chart below:

**Changes in notional value of derivatives in the sample, based on available information**

![Chart showing changes in notional value of derivatives](chart)

This trend reflects the desire of large entities to reduce the sensitivity of their balance sheet to financial risks and to limit the volatility of results, for example through strategies to hedge exchange rate exposure. What is more, at a time of low rates entities in this sector use derivatives in their investment strategies order to innovate (a combination of government bonds and credit derivatives in the private sector leading to improved returns, for example).
For users of accounts, this means that much more additional information is required if they are to have a sound grasp of an entity’s real exposure.

### 3.2. The regulatory framework

Set against the increasing use of these instruments and the attention paid by regulators, we have conducted a review of IFRS requirements in terms of the disclosures in the accounts.

As in the case of corporate financial instruments, IFRS 7 is applicable to derivative instruments, and requires disclosures on:

- fair value measurement (using the three-level hierarchy as defined in IAS 39);
- the risks inherent in these instruments:
  - qualitative reporting on exposure to the different risks (credit, liquidity, market);
  - quantitative reporting on exposure and disclosures specific to each risk type (credit, market and liquidity).

Where derivative instruments are used in a hedging strategy, IFRS 7 requires detailed qualitative and quantitative disclosures on the objectives and impact by the type of hedging of strategy used.

At this stage, the regulatory framework contains few specific requirements for disclosures on derivatives. However the IFRS 7 amendment, which is effective from 2013, will introduce additional requirements for collateralised derivatives.
3. Derivative instruments

3.3. Diverse use

We have studied the available disclosures in the annual accounts of our sample, starting with the analysis of information on exposure.

Of the 16 entities in our sample, 12 devote a specific note to the subject of derivatives. The remaining four mention them in the note on investments.

In 2012, the majority of entities report the notional amount of these instruments, though IFRS 7 imposes no explicit obligation to do so.
Though the standard does not require disclosure of the notional amounts, it does demand that the fair value of these instruments is entered on the statement of financial position. All the entities in our sample present the fair value of these instruments on the statement of financial position. This information is important because it makes it possible to assess an entity’s exposure to counterparty risk. With the exception of credit derivatives (CDS), the credit risk run by the holder of the derivative corresponds to the fair value where this is positive, and thus recognised as an asset rather than the notional value of the derivative.

### 3.4. Managing the counterparty risk

The counterparty risk is one of the risks most closely monitored by regulators, because of the potential systemic risks in the event of default by a major player.

The majority of entities in our sample are aware of the scale of this risk and describe the way it is managed through a policy of collateralisation. Interestingly, only one entity in our sample reports the systematic use of collateral. Nonetheless, the majority do report that the risk is monitored and under control. The implementation of EMIR and the mandatory offsetting procedures should increase its cover.

In the case of credit default swap (CDS), reporting the fair value alone is not sufficient to assess the counterparty risk of the underlying object of the contract. For this type of instrument, information on the notional value, the quality of the underlying asset and the ‘direction’ of the contract (buyer/seller of protection) are necessary to understand the risk incurred by the entity. Although not all entities use this type of instrument, rather few provide all the information necessary, particularly regarding the notional values of these instruments.
3.5. Diverse levels of disclosure

Although the standards do not give strict guidance, we have tried to compare the entities in our panel for the following aspects:

- description of the objective sought through the use of derivative instruments, and the extent to which entities provide detailed disclosures;
- the extent to which these instruments are used;
- the depth of information disclosed to understand how strategies are implemented.

In the first case, we found that the objectives are very similar from one entity to another. These objectives are generally described and mainly consist of:

- the management of financial risks through hedging strategies;
- the setting up of investment strategies to remedy the lack of market depth for some asset types (e.g. high-quality corporate bonds).
However, in the second case we found a wide range of practices, as illustrated in the chart below:

![Volume of notional derivative amounts](chart)

To measure and compare the depth of information provided on the implementation of strategies, we have identified the different approaches used by the insurers in our sample to construct a scorecard.

The results of this analysis can be presented as follows:

![Types of presentation](chart)
Of the 8 approaches identified, the majority of entities in our sample use a maximum of five:
3.6. Hedge accounting

Our findings on the derivatives used in the course of hedge accounting under IAS 39 as required by IFRS 7 are two-fold:

- qualitative disclosures are generally given for each type of strategy (nature of the risk hedged, description of the instruments used, description of the strategy and its aims, etc.);

- however, there is no widespread compliance in our sample with the requirements for quantitative disclosures on accounting impacts and the effectiveness of the strategies:
  - for the cash flow hedge:
3. Derivative instruments

- Further, an entity should separately present the following accounting impacts:

  - NIH*: ineffectiveness recognised in P&L
  - FVH*: gains and losses on hedging instrument
  - FVH*: gained and losses on hedged item

  \* NIH: Not Investment Hedge - FVH: Fair Value Hedge

To conclude our look at derivative instruments, we would like to highlight the following observations:

- this is an area where there is currently little guidance in IFRSs in terms of specific disclosures on exposures and how they are managed;
- the use and level of available information vary from one entity to another;
- the general growth in the volumes concerned calls for a clearer framework to facilitate understanding of exposures and their comparison from one entity and another and from one year to the next. It is nevertheless reassuring to observe that the disclosures provided by our sample reveal no significant net exposure from the use of derivatives.

Our 2013 survey will monitor the future impacts on financial communication of the IFRS 7 amendment and the first application of IRFS 13. This last standard is likely to have potentially significant impacts on the accounts where derivative instruments are not subject to a policy of collateralisation.
4. INSURERS’ PRACTICES IN THE CASE OF A DEFERRED TAX ASSET

Like intangible assets, deferred tax assets (DTA) appear to be a sensitive item in companies’ balance sheets.

Although the overall net deferred tax position is recognised in liabilities on the balance sheet of the great majority of entities in our sample, the recoverability of any deferred tax assets recognised requires disclosures insofar as the analysis must be conducted at entity level. The prospects for the future taxable base being threatened by the financial and economic circumstances.

The amount of deferred tax before offsetting and application of IAS 12.74 has risen by 15.3% over the 2012 reporting period.

- The amount as a proportion of equity had risen to 19.9% at end-2012.
- These facts highlight the importance of documenting the recoverability of deferred tax assets when they are recognised.

Cumulative amount of DTAs and ratio to equity

![Graph showing the cumulative amount of DTAs and ratio to equity](image-url)
Further, the proportion of DTAs relative to the tax losses carried forward has fallen, reaching 14.1% at end-2012. This development illustrates the fact that over the course of the 2012 reporting period, insurers have consumed a part of this amount.

Nonetheless, insurers must demonstrate that the significant sums remaining on the balance sheet are recoverable over a reasonable period of time.

The regulatory framework

A deferred tax asset is only recognised if the entity can demonstrate the probability of having sufficient future taxable profits over a reasonable time period. This applies to both deductible temporary differences and to the carry forward of tax losses and unused tax credits.

Future taxable profits justifying recoverability must be in the same tax jurisdiction and relate to the same taxable entity as the entity recognising the asset.
4. Insurers’ practices in the case of a deferred tax asset

In the case of DTAs associated with losses carried forward, the existence of recent tax losses is a strong indication that future profits will not be sufficient. In this instance, future profits in excess of the temporary differences necessary to justify recognition of the asset must be the subject of disclosures on the amount of a deferred tax asset and the nature of the evidence supporting its recognition (IAS 12 – 82).

IAS 12 requires other disclosures, including:

- presentation of the expiry dates of tax losses carried forward for which no DTA has been recognised;
- distinction between amounts recognised in equity and/or in profit and loss.

Our analysis of the disclosures provided by the entities in our sample reveals scope for improvement. Further, the level of disclosures varies across the sample. Some entities disclose none of the information required by the standard.

- A majority present the amounts recognised in P&L and in equity.
- Only three insurers mention the amount of DTAs dependent on future taxable profits in excess of those generated by the reversal of temporary differences. However, the type of evidence justifying recognition is not disclosed.
4. Insurers’ practices in the case of a deferred tax asset

- There is no systematic disclosure of expiry dates of deferred tax assets.

At present it is difficult to make comparisons of this balance sheet item using the available information.
5. ANALYSIS OF MOST COMMON PERFORMANCE INDICATORS: NO MAJOR CHANGES IN 2012
In addition to IFRSs, insurance entities use other kinds of metrics to express their performance. In life insurance, Embedded Value (EV) is the main tool.

**Embedded Value as the main measure of performance for the Life business**

This indicator has been decried because of its de-coupling from the stock market valuation of insurance entities. However, it remains interesting for more than one reason:

- it remains one of the basic indicators for measuring the profitability of Life business, and its ability to generate cash flows;
- it is the indicator closest to the Solvency II prudential balance sheet;
- a majority of insurers use it to meet IFRS 7 requirements for disclosures on sensitivity to market risks (IRFS 7 40 and 41).

### 5.1. Definition and regulatory framework

The disclosures required focus on the creation of shareholder value, as they include:

- the discounted value of future cash flows from portfolio contracts attributable to shareholders;
- new business value;
- changes in available capital.

The principle of Embedded Value has evolved over three generations:

- traditional Embedded Value, corresponding to a deterministic scenario projection;
- European Embedded Value (EEV), corresponding to stochastic projections aiming to capture the impact of asset-liability mismatches;
- Market Consistent Embedded Value (MCEV), corresponding to stochastic projections in a ‘risk neutral’ environment, resembling the measurement of any financial assets under no-arbitrage conditions.
Today, more than half of the European entities in our sample have adopted the MCEV. Players who continue to publish an EEV mostly use a market consistent approach to calculate the time value of options and guarantees. The main difference between EEV and MCEV lies in the calculation of the cost of capital and its presentation. The breakdown of entities by Embedded Value type is unchanged since 2011, suggesting a degree of stability in the main methodological principles applied, perhaps pending greater changes if the technical reference of Pillar 1 of Solvency II brings clarification.

Framework used

FOCUS ON ASIA / US / AUSTRALIA

Entities elsewhere in the world, including in Asia, publish an Embedded Value, generally on a deterministic basis.
5. Analysis of most common performance indicators: no major changes in 2012

5.2. Performance in 2012

2012 saw rises in most published Embedded Values, due to the strengthening share markets and the tightening of sovereign debt spreads:

Market consistent approaches are by nature very sensitive to changes in the financial environment, and the persisting low-rate environment has had a significant impact. The sensitivity of this indicator to changing economic parameters is high, as the following extract illustrates:

Source: Allianz Group, MCEV report 2012
5.3. Some key assumptions and parameters

5.3.1. Extrapolation of the rate curve

After a year which saw the harmonisation of methods of calculating the illiquidity premium, there were few changes in 2012.

Divergences remain, in particular in the extrapolation of the rate curve:

- in terms of the last observation period applied;
- in the speed of convergence towards the (Ultimate Forward Rate).

The sensitivity analyses recommended by the CFO Forum for the illiquidity premium are not always conducted.

In general, few changes can be expected in terms of convergence, since the Solvency II standard on the calculation of economic liabilities is still the subject of in-depth debate: the convergence/divergence between Embedded Value and an economic balance sheet approach in life insurance remains a major issue.
5. Analysis of most common performance indicators: no major changes in 2012

5.3.2. Required capital and Free Surplus

Free Surplus is the amount in excess of the required capital. However, required capital is assessed in different ways by market players:

- compliance with regulatory requirements;
- maintaining a minimum rating;
- economic capital.

The diversity of definitions of required capital across our sample illustrates these disparities:

- five entities base their definition on a percentage of the regulatory requirements;
- one entity analyses required capital as the level necessary to maintain a minimum rating;
- two define it as the highest of a percentage of the regulatory requirement, the economic capital and the capital required to maintain a minimum rating;
- one insurer defines it as economic capital.

Therefore, Free Surplus is difficult to compare from one insurer to another, and may even be negative in some cases, more because of the constraints set by the insurers themselves than because of a capital requirement imposed by the regulator.
5.4. The future Solvency II framework

Within our sample, the Embedded Value has been very volatile (on average +15%, -10% and +18% in 2010, 2011 and 2012 respectively).

This volatility primarily reflects market conditions: changes in financial assumptions have had an average 19% impact on Value in Force and 9% on Embedded Value.

<table>
<thead>
<tr>
<th>Entity</th>
<th>% Impact on VIF</th>
<th>% Impact on EV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>B</td>
<td>87%</td>
<td>16%</td>
</tr>
<tr>
<td>C</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>D</td>
<td>30%</td>
<td>6%</td>
</tr>
<tr>
<td>E</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>F</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>G</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>H</td>
<td>39%</td>
<td>19%</td>
</tr>
<tr>
<td>I</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>J</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>K</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>L</td>
<td>49%</td>
<td>28%</td>
</tr>
<tr>
<td>M</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Average</td>
<td>19%</td>
<td>9%</td>
</tr>
</tbody>
</table>

The volatility of Embedded Value foreshadows the volatility of future prudential balance sheets of life insurers (under Solvency II), as the best estimate calculation of liabilities is similar to the Embedded Value approach.
5. Analysis of most common performance indicators: no major changes in 2012

In terms of disclosures, some analyses of changes in value are converging towards a risk classification which is close to Solvency II:

Source: Zurich Insurance Group, Annual Report 2012
5.5. Links with the market capitalisation of insurance companies

As in previous years, we have also considered market perceptions of this indicator via its contribution to the valuation of the companies concerned. This link can be measured using an approach by multiples of the Embedded Value. The median ratio is increasing, while remaining below 1, although Embedded Value does not include future new business.

<table>
<thead>
<tr>
<th>Entity</th>
<th>2011 multiple</th>
<th>2012 multiple</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>75%</td>
<td>85%</td>
<td>+ 10 pts</td>
</tr>
<tr>
<td>B</td>
<td>85%</td>
<td>98%</td>
<td>+ 12 pts</td>
</tr>
<tr>
<td>C</td>
<td>76%</td>
<td>87%</td>
<td>+ 12 pts</td>
</tr>
<tr>
<td>D</td>
<td>62%</td>
<td>78%</td>
<td>+ 16 pts</td>
</tr>
<tr>
<td>E</td>
<td>48%</td>
<td>54%</td>
<td>+ 6 pts</td>
</tr>
<tr>
<td>F</td>
<td>91%</td>
<td>98%</td>
<td>+ 7 pts</td>
</tr>
<tr>
<td>G</td>
<td>73%</td>
<td>81%</td>
<td>+ 8 pts</td>
</tr>
<tr>
<td>H</td>
<td>90%</td>
<td>106%</td>
<td>+ 16 pts</td>
</tr>
<tr>
<td>I</td>
<td>64%</td>
<td>66%</td>
<td>+ 2 pts</td>
</tr>
<tr>
<td>J</td>
<td>25%</td>
<td>40%</td>
<td>+ 16 pts</td>
</tr>
<tr>
<td>K</td>
<td>100%</td>
<td>112%</td>
<td>+ 12 pts</td>
</tr>
</tbody>
</table>

Average 72% 82% + 11 pts
Median 75% 85% + 10 pts
Average (excl min & max) 74% 84% + 10 pts

The range of values suggests that there is no ‘market’ discount on the Embedded Value of insurance companies.

Nonetheless, the stability of the average and the range of values does suggest that there is a correlation between market fluctuations and that of the Embedded Value.
5.6. A focus on cash-flows

Embedded Value still has a place in the presentation of insurance entities’ results, but future cash flows come before absolute value:

**Life & Savings expected free cash flows (Euro m)**

<table>
<thead>
<tr>
<th></th>
<th>Existing Run Off 2011</th>
<th>New Business 2011</th>
<th>Free Cashflow 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Run Off 2012</strong></td>
<td>862</td>
<td>(678)</td>
<td>(945)</td>
</tr>
<tr>
<td><strong>New Business 2012</strong></td>
<td>1,886</td>
<td>(945)</td>
<td>1,124</td>
</tr>
<tr>
<td><strong>Free Cashflow 2012</strong></td>
<td></td>
<td>629</td>
<td>(760)</td>
</tr>
<tr>
<td><strong>Existing Run Off 2011</strong></td>
<td></td>
<td>2,151</td>
<td>(987)</td>
</tr>
<tr>
<td><strong>New Business 2011</strong></td>
<td></td>
<td></td>
<td>1,034</td>
</tr>
</tbody>
</table>

This can be explained by the complexity of the calculations, their volatility and the disconnect previously noted between Embedded Value and capitalisation. Disclosures focusing on cash flows provide reassurance on the capacity to generate dividends.
Conclusion

Compared with the recent past, 2012 seems to have been a relatively stable year: there have been few methodology changes, and Embedded Values have risen in line with financial trends, which are better than in previous years.

The focus is now clearly on the generation of cash flows.

The persistence of the benchmarks and methodologies used is an on-going question, and in our view depends on the development of the future regulatory standard Solvency II.
6. INDICATORS OF SOLVENCY AND CAPITAL MANAGEMENT
WHAT DISCLOSURES ARE NEEDED AGAINST THE FINANCIAL AND REGULATORY BACKGROUND?

6.1. Introduction

Since the financial crisis erupted, investors have kept a close eye on the capital of major insurers, in terms of both its adequacy and the effectiveness of its management against the background of dramatic regulatory change and stress in the debt markets.

During the financial crisis, the solvency ratio (calculated in accordance with the Solvency I directive) has received much attention, exposing the limits inherent in its method of calculation (the ratio takes no account of all the risks assumed by insurers, for instance financial risks).

With the arrival of Solvency II, capital management and the calculation of the solvency ratio are becoming more complex, with an approach which seeks to quantify the potential impact of most risks on the insurer’s balance sheet on this basis of modelling.

Capital management is thus at the heart of insurers’ financial communication and occupies an increasingly significant part of annual reports.
The main focus of our analysis of the available disclosures regarding capital management lies in:

- analysis of the information content;
- analysis of the quantitative information;
- the indicators chosen to measure the efficiency of capital management.

### 6.2. Analysis of the information content

#### 6.2.1. Solvency I

Disclosures relating to Solvency I focus on the solvency ratio. Its simplicity and regulatory credibility make it a key indicator in financial information:

All European insurers publish details of the solvency ratio under Solvency I. Four of them disclose the available capital breakdown, and some conduct sensitivity tests on the ratio.
6.2.2. Solvency II

The introduction of the Solvency II directive has also led insurers to make qualitative and quantitative capital disclosures.

The qualitative information is mainly concentrated in the annual report, which addresses the implications of the Solvency II reform and the operational impacts, including:

- where applicable, a description of the measures and governance introduced for the implementation of the project;
- the status of discussions with the regulator regarding pre-approval of the internal model.

The first finding regarding the quantitative disclosures is that it is currently difficult to identify whether some insurers have opted for an internal model, a partial internal model, or the standard formula to meet the needs of the Solvency II reform. As we understand it, most are tending towards the introduction of an internal model.

**Internal model vs standard formula**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fully internal model</th>
<th>Partial internal model</th>
<th>No information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>25%</td>
<td>58%</td>
<td>17%</td>
</tr>
<tr>
<td>2012</td>
<td>25%</td>
<td>69%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Most entities using an internal model provide disclosures on:

- the current use of the model in asset and liability management (for those who are adapting an existing model to the requirements of Solvency II);
- the status of discussions with the regulator regarding pre-approval of the internal model.
Rather fewer insurers provide:

- figures per risk, geographical area, etc.;
- the methods used and assumptions per risk (other than the quantile);
- sensitivity analyses.

Given the uncertainties inherent in the current state of the standards, two entities disclose what their solvency ratio would be under Solvency II.

**Solvency ratio disclosures**

<table>
<thead>
<tr>
<th>Solvency ratio in accordance with current local regulations</th>
<th>Solvency II ratio</th>
<th>Economic ratio</th>
<th>No information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solvency ratio</td>
<td>12</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Solvency II ratio</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Economic ratio</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>No information</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
6.2.3. Economic capital

In contrast, a majority of the entities in our sample make disclosures regarding the management of economic capital, representing the actual need for equity and free of regulatory constraints: seven insurers disclosed an economic capital solvency ratio. However, the calculation methods are not always specified:

- some entities use a different quantile from that used under Solvency II (99.5%);
- among those that disclosed the quantile used, none addressed the methodological differences between the economic capital model and Solvency II: only five disclosed information consistent with the conceptual framework of Solvency II.

Therefore, there is a degree of diversity in the depth of the disclosures which makes comparison difficult.

Assembling the main disclosures on solvency in a report for the public (a requirement under Pillar 3 of the Solvency II directive), will certainly provide an opportunity for an in-depth debate on the method of communicating key information.
6.3. Comparison of quantitative disclosures

Changes in the ratios can also be analysed:

![Average ratios graph]

6.3.1. Average unweighted ratio in the sample

The trend is the same in both ratios, though the underlying explanations are to some extent different: improved credit spreads and unrealised gains in the case of the Solvency I ratio, and developments which are more difficult to summarise for the economic capital ratio, due to the multiplicity of underlying risk factors.
Best practices for the disclosure of economic capital analyses are emerging, including the analysis of changes to the numerator (available capital) and the denominator (capital requirement), following the impact of changing models or assumptions:

![Diagram showing changes in capital ratios and components]

Source: Allianz, Analysts’ conference – 22 February 2013

In the context of the introduction of the new prudential regulation Solvency II, the economic capital ratios published by most entities are satisfactory at first sight (around 175% on average). Nonetheless, it would be premature to forecast their compliance with the eventual Solvency II framework insofar as the majority are based on an economic capital model which may be different. Ongoing discussions in the wake of the LTGA (Long-Term Guarantee Assessment) studies will take decisions on the key methodologies in these calculations.
Disclosures on the sensitivity of economic capital models and their integration into asset and liability management are nevertheless a valuable source of information for investors and regulators alike (use-test). Likewise, taking account of weighting by risk type (financial, subscriptions (P&C, Life), operational) and the impact of diversification in the models provide useful information for assessing the resilience of insurers.

Source: Munich Re, Analysts’ conference 2013

<table>
<thead>
<tr>
<th>Economic risk capital – Breakdown by risk category</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prop.-casualty¹</td>
<td>9.5</td>
</tr>
<tr>
<td>Life and health</td>
<td>6.6</td>
</tr>
<tr>
<td>Market</td>
<td>11.4</td>
</tr>
<tr>
<td>Credit²</td>
<td>6.7</td>
</tr>
<tr>
<td>Operational risk</td>
<td>1.2</td>
</tr>
<tr>
<td>Simple sum</td>
<td>35.4</td>
</tr>
<tr>
<td>Diversification</td>
<td>−11.0</td>
</tr>
<tr>
<td>Total ERC</td>
<td>24.4</td>
</tr>
</tbody>
</table>

Source: Allianz, Analysts’ conference – 22 February 2013

<table>
<thead>
<tr>
<th>Estimation of stress impact²</th>
<th>Confidence level 99.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio as of 31.12.12</td>
<td>190%</td>
</tr>
<tr>
<td>Interest rate +100bps</td>
<td>220%</td>
</tr>
<tr>
<td>Interest rate -100bps</td>
<td>177%</td>
</tr>
<tr>
<td>Equity markets +30%</td>
<td>210%</td>
</tr>
<tr>
<td>Equity markets -30%</td>
<td>188%</td>
</tr>
<tr>
<td>Credit spread³ +100bps</td>
<td>184%</td>
</tr>
<tr>
<td>FX USD -10%</td>
<td>199%</td>
</tr>
<tr>
<td>Interest rate -100bps/ equity markets -30%</td>
<td>165%</td>
</tr>
</tbody>
</table>

Source: Allianz, Analysts’ conference – 22 February 2013
The general trend in our sample is towards an increase in disclosures provided in different communication media with the arrival of the Solvency II reform. Some entities still have a long way to go.

**Conclusion**

As in the case of Embedded Value, there are few significant changes in insurers’ disclosures regarding capital management.

However, the inclusion of the economic capital indicator in the strategies of some entities is increasingly evident in their annual disclosures.

Risk and capital management seem to be under control in most of the large entities in the sample. Though we are still awaiting the finalisation of the strictly quantitative Pillar 1 indicators, Pillar 2 of the Solvency II reform appears to be in place in the disclosures of major entities.
Against a difficult background, the analysis and comparison of accounts presented under IFRSs remains a complicated affair. The 2012 financial period has seen no major advances in terms of financial information. The methods used and the accounting principles adopted appear, in key respects, to diverge between European insurers. These factors, combined with a still-difficult economic and financial environment, help to explain the below-par stock exchange valuations by comparison with the IFRS net asset value or the Group EEV, as well as the reduced attractiveness of this sector to investors.

Comparability could be improved in a number of accounting areas (the sensitivity of goodwill, derivative instruments, the impairment of financial assets), although there have for some years been improvements in disclosures regarding embedded value. This last point remains the key non-accounting indicator for expressing the performance of the Life business. Insurers are increasingly likely to supplement this information by cash flow indicators generated by the business, such as the Free Surplus.

More generally, the prospective implementation of phase II of IRFS 4, the effective date of which is uncertain and which could bring more volatility into the accounts, coupled with the introduction of Solvency II, which still presents considerable uncertainties, are factors unlikely to improve the situation in the short term.
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