

MAZARS INSIGHT

A close-up photograph of a hand holding a black fountain pen with a silver nib, positioned over a document with a grid of numbers. The document is slightly out of focus, showing various numerical values and some text. The background is a soft, warm yellow.

**The areas of greatest subjectivity and interest within the financial statements of Large European Insurance Groups**

All rights reserved - Mazars - October 2009

The representation or reproduction of all or part of this document without the permission of Mazars or the rights holders or assignees is expressly forbidden (Law of 11 March 1957, article 40(1)).

Such representation or reproduction in any form is an offence under articles L335-2 and seq. of the Intellectual Property Code.

Under paragraphs 2 and 3a of article L122-5 of the said code, only “copies and reproductions strictly reserved for the private use of the copyist and not destined for collective use” or “analyses and short quotations” for the purposes of explanation and illustration are authorised.

<b>Introduction .....</b>	<b>4</b>
<b>I. Scope of study.....</b>	<b>5</b>
<b>II. Accounting for financial instruments.....</b>	<b>6</b>
<b>A - Financial instrument reclassification.....</b>	<b>6</b>
<b>B - Methods to determine financial instruments' fair value.....</b>	<b>8</b>
1 - Fair value information.....	10
2 - Information with regard to fair value levels: an increasing proportion of model-based valuation.....	14
<b>C - Financial Instruments Impairment.....</b>	<b>16</b>
<b>III. Exposure to financial risks.....</b>	<b>20</b>
<b>A - Impact of implementation of IFRS 7 .....</b>	<b>20</b>
1 - Credit risk.....	20
2 - Liquidity risk .....	21
3 - Market risk .....	22
4 - Risk management.....	24
<b>B - Disclosure focussed on the financial crisis .....</b>	<b>25</b>
<b>IV. Information regarding key indicators.....</b>	<b>27</b>
<b>A - Solvency margin: a difficult indicator to compare .....</b>	<b>27</b>
1 - Definition and regulatory framework .....	27
2 - Calculation method and large aggregates .....	27
3 - Information provided by groups as at 31 December 2008.....	28
<b>B - Embedded Value: consistency of methodology needing to be improved.....</b>	<b>30</b>
1 - Definition .....	30
2 - Financial reports significantly impacted by the 2008 financial crisis.....	31
3 - A reference yet to be established .....	32
<b>V. Conclusion .....</b>	<b>34</b>

Many insurance groups' financial close as at 31 December 2008 was performed in the depths of a financial crisis and was heavily impacted by unfavourable circumstances, such as:

- The beginning of a recession for the most significant global economies;
- Decrease in interest rates;
- Increase of credit risk;
- Lack of liquidity for some assets;
- Fall of debt and equity instruments' market value;
- Very high volatility of markets.

Given the uncertainty in the financial markets, analysts' and investors' expectations were raised in terms of the transparency of information, considering insurers' intrinsic risks as financial investors, as well as the inherently judgmental elements of insurers' financial statements.

Against this background Mazars have analysed the financial statements of several of the largest European insurance groups, considering areas of greatest subjectivity and interest such as:

- Valuation of financial instruments;
- Groups' exposure to financial risk;
- Information on solvency margin indicators and Embedded Value.

Our analysis has allowed us to assess the achievement of IFRS' objectives even in a stressed environment i.e. the production of comprehensible, relevant & comparable financial statements.

Mazars analysed the published annual reports of the following eleven European insurance and reinsurance groups as at 31 December 2008:

Country	Insurance and Reinsurance Groups
France	AXA, SCOR, CNP
Germany	Allianz, Munich Re
United Kingdom	Aviva, Old Mutual, Aegon
Switzerland	Swiss Life, Zurich
Italy	Generali

In particular the following points have been addressed:

- Financial instruments disclosure, from the use of the assets reclassification option following IAS 39 amendments, to the determination of fair value in the framework of inactive markets and the impairment issue in unstable and falling financial markets;
- Published information regarding the nature of activities and the group's exposure to key financial risks;
- Description of funds management and an indicator that attracted great interest during the current economic downturn: the solvency margin;
- Disclosure relating to the value of the business: what kind of use have groups made of Embedded Value?

In these areas, annual financial reports and other financial report extracts have been used to illustrate the points in question.

# Accounting for financial instruments

Against the background of one of the most severe global recessions in living memory, readers' expectations with regards to financial statements disclosure provided about the classification and valuation of financial instruments would appear to be well justified.

## A - FINANCIAL INSTRUMENT RECLASSIFICATION

Initial expectations relate to use of financial instruments' reclassifications in reference to the publication of the amendment to IAS 39.

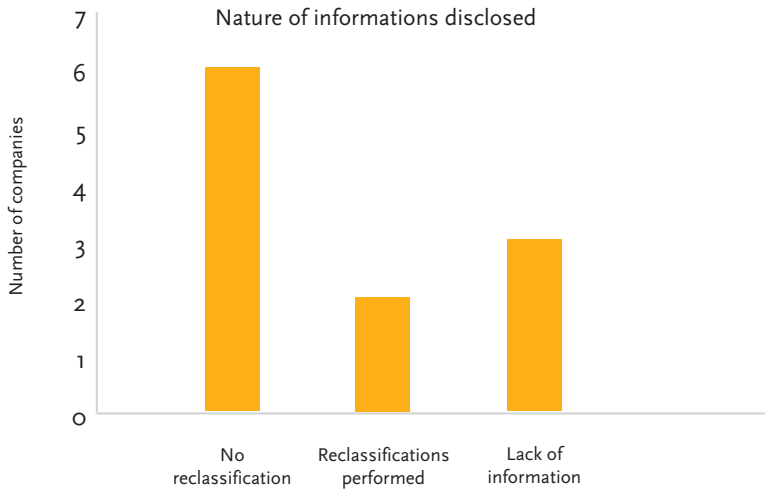
In order to maintain fair competition between entities using US GAAP and those using IFRS, the IASB decided to allow the reclassification of non derivative financial assets from fair value class to another class. The relevant paragraph in IAS 39 (revised) is paragraph 50, which used to prevent any reclassification to or from the category "fair value through profit and loss".

These arrangements are similar to those authorised by FAS 115 and FAS 65, even if the terms are different due to the differences in the underlying standards. These have been adopted under rare circumstances and are applicable from the 1 July 2008 - the third quarter of 2008 financial statements - thus avoiding the long process that typically characterises changes in accounting standards.

This amendment allows the reclassification from the "Held for trading" category to "Held to maturity" and "Available for sale", and from "Held for trading" or "Available for sale" categories to "Loans and Receivables". However, reclassifications listed below remain forbidden:

- ▶ Derivatives remain classified as "fair value through profit and loss", in every instance;
- ▶ Instruments classified as "fair value through profit and loss" pursuant to the fair value option, cannot be reclassified;
- ▶ Reclassifications of any category to the category "fair value through profit and loss" are forbidden.

On the whole, insurers did not have significant reason to use reclassification options given by the IASB's amendments as described above.



Groups who have made use of these reclassification options have provided full information.

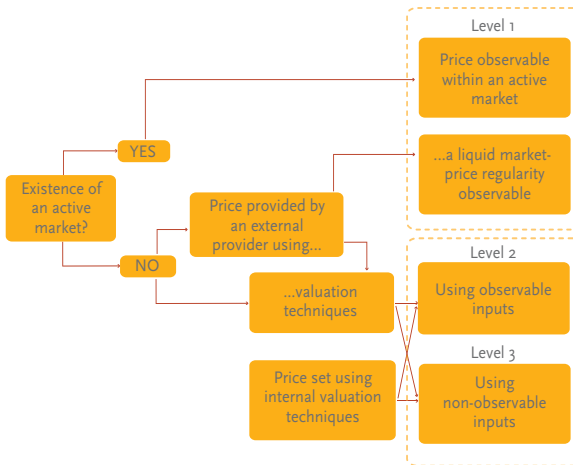
The limited usage of these amendments is mainly due to:

- The restriction on reclassifying structured instruments (CDOs, etc) due to the presence of embedded derivatives;
- The lack of reconsideration of the fair value option process, which remains irrevocable.

## B - METHODS TO DETERMINE FINANCIAL INSTRUMENTS' FAIR VALUE

The fall of the markets at the end of 2008 made it more difficult to determine the fair value of assets held by the insurance groups.

If possible, fair value is usually based on market value. The process to determine fair value is the following:



Recent market conditions have generated an increased use of valuation techniques for assets assessed at fair value. Although allowed by applicable standards, these techniques have contributed to the increased complexity of fair value determination, and increased judgment in the valuation of illiquid assets held in the balance sheet.

The SEC and the FASB initially provided clarifications for the accounting treatment of financial assets at fair value when markets are inactive. These were issued on the 30 September 2008 and 10 October 2008 (FAS 157-3), respectively:

- Adjustment of the discount rate of the risk taken into account by any market participant (counterparty risk, non-performance risk, liquidity risk, or model risk) is justified. These adjustments are reasonable and appropriate, after the assessment of the information available;
- Brokers' quotations are not necessarily a true representation of fair value, since they do not necessarily reflect transactions in the market;

# Accounting for financial instruments

- Transactions resulting from forced sales must not be taken into consideration to determine a financial instrument's fair value. In a period of inactive markets, it is not appropriate to conclude that all the market activity is coming from liquidations or forced sales. However, under these same conditions, it is not appropriate to conclude that any transaction cost observed is necessarily representative of fair value. Professional judgment helps to determine whether a transaction is forced or not;
- The value of some transactions taking place in an inactive market should be taken into consideration in the valuation of financial instruments but are not necessarily determining.

The use of judgment is required in the determination of market activity even if this determination can affect indicators, such as the significant decrease of transaction volume as well as the level of market activity, the significant spread of price variation available over time and among the different market participants or the fact that prices do not correspond sufficiently to recent transactions. Therefore, during crisis, the use of judgment in the financial closure process of insurance groups increased considerably.

As a result, it is becoming increasingly difficult to understand the sensitivity of financial assets' fair value to variations in the key market measures and indicators. Users of financial statements are seeking to find accurate and detailed financial information regarding the process in determining fair value in order to assess the development of key totals.

## *Outlook:*

On 28 May, the IASB published a survey concerning an application guide to fair value. The conclusions made by the IASB in this survey are taken from the FAS 157, in particular its recent application guide. These conclusions are online including the recommendations made by the Expert Advisory Panel, mentioned above. This project suggests a global definition of the fair value concept. For each standard referring to the fair value notion, the project describes a way of measuring it. These methods of determining fair value would replace the various standards currently used. This project does not propose to extend the use of fair value valuations. Rather, the text is intended to reinforce disclosure requirements about the way in which fair values are determined.

## 1 - Fair value information

Applicable standards:

IAS 39 is relatively explicit in explaining the process to follow when determining the fair value of an asset (paragraphs AG69 to AG82 of IAS39).

Some insurance groups such as AXA are quite detailed in their consolidated financial statement notes describing the methods used to determine and account for the fair value of assets held:

### 9.9. FINANCIAL ASSETS RECOGNIZED AT FAIR VALUE

#### 9.9.1. Fair value measurement

##### a) Active market: quoted price

The Group applies the IAS 39 fair value hierarchy as described below for both assets measured at fair value (and assets at cost for which fair value is disclosed in the previous notes).

Fair values of financial assets traded on active markets are determined using quoted market prices when available. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis between a willing seller and a willing buyer. For assets traded in active markets, quotes received from external pricing services represent consensus prices.

The amount of assets for which fair value is determined in whole directly by reference to an active market is disclosed in column (1) of the table shown below in section 9.9.2.

##### b) Active versus inactive markets

Equity securities quoted on exchange traded developed markets and bonds actively traded on liquid markets for which prices are regularly provided by external pricing services that represent consensus with limited dispersion and for which quotes are readily available are generally considered as being quoted in an active market. Liquidity may be defined as the possibility to sell or dispose of the asset in the ordinary course of business within a certain limited time period at approximately the price at which the investment is valued. Liquidity for debt instruments is assessed using a multi criteria approach including the number of quotes available, the place of issuance and the evolution of the widening of bid ask spreads.

A financial instrument is regarded as not quoted in an active market if there is little observation of transaction prices as an inherent characteristic of the instrument, when there is a significant decline in the volume and level of trading activity, in case of significant illiquidity or if observable prices can not be considered as representing fair value because of dislocated market conditions. Characteristics of inactive markets can therefore be very different in nature, inherent to the instrument or be indicative of a change in the conditions prevailing in certain markets.

##### c) Assets not quoted in an active market

The fair values of financial instruments that are not traded in an active market are estimated:

- using external and independent pricing services, or
- using valuation techniques.

The amount of assets which are not traded in an active market is disclosed in column (2) of the table shown below in section 9.9.2.

##### • No active market: use of external pricing services

External pricing services may be fund asset managers in the case of non consolidated investments in funds or brokers. To the extent possible, the Group collects quotes from external pricing providers as inputs to measure the fair value of assets held. Prices received may form tight clusters or dispersed quotes which may then lead to the use of valuation techniques. The dispersion of quotes received may be an indication of the large range of assumptions used by external pricing providers given the limited number of transactions to be observed or reflect the existence of distress transactions. In addition, given current market conditions and the complete inactivity of some markets, many financial institutions closed their desks dedicated to structured assets deals and are no longer in a position of delivering meaningful quotes.

##### • No active market: use of valuation techniques

Valuation techniques are subjective in nature and significant judgment is involved in establishing fair values for financial assets. They include recent arm's length transactions between knowledgeable willing parties on similar assets if available and representative of fair value and involve various assumptions regarding the underlying price, yield curve, correlations, volatility, default rates and

# Accounting for financial instruments

other factors. Unlisted equity securities are based on cross checks using different methodologies such as discounted cash flows techniques, price earning ratios multiples, adjusted net asset values, taking into account recent transactions on instruments which are substantially the same if concluded at arm's length between knowledgeable willing parties, if any. The use of valuation techniques and assumptions could produce different estimates of fair value. However, valuations are determined using generally accepted models (discounted cash flows, Black&Scholes models, etc.) based on quoted market prices for similar instruments or underlyings (index, credit spread, etc.) whenever such directly observable data are available and valuations are adjusted for liquidity and credit risk.

Valuation techniques may be used when there is little observation of transaction prices as an inherent characteristic of the market, when quotes made available by external pricing providers are too dispersed or when market conditions are so dislocated that observed data can not be used or need significant adjustments. Internal mark to model valuations are therefore normal market practices for certain assets inherently scarcely traded or exceptional processes implemented due to specific market conditions.

- Use of valuation techniques in dislocated markets

The dislocation of certain markets may be evidenced by various factors, such as very large widening of bid ask spreads which maybe helpful indicators in understanding whether market participants are willing to transact, wide dispersion in the prices of the small number of current transactions, varying prices over time or among market participants, inexistence of secondary markets, disappearance of primary markets, closing down of dedicated desks in financial institutions, distress and forced transactions motivated by strong needs of liquidity or other difficult financial conditions implying the necessity to dispose of assets immediately with insufficient time to market the assets to be sold, and large bulk sales to exit such markets at all costs that may involve side arrangements (such as sellers providing finance for a sale to a buyer). Transactions do not meet the definition of a forced or distress sale if the seller had a reasonable amount of time to market the assets or there were a number of parties competing to buy. However, in an inactive market, a transaction price for the same instrument might not represent fair value if the transaction involved a seller that needed to sell the assets and there was one or very few buyers.

In such cases, the Group uses valuation techniques including observable data whenever possible and relevant, adjusted if needed to develop the best estimate of fair value, including adequate risk premium or develops a valuation model based on unobservable data representing estimates of assumptions that willing market participants would use when prices are not current, relevant or available without undue costs and efforts: in inactive markets, transactions may be inputs when measuring fair value, but would likely not be determinative and unobservable data may be more appropriate than observable inputs. The objective of these models is to arrive at the price at which an orderly transaction would take place between market participants (a willing buyer and a willing seller) at the measurement date.

For those assets for which the Group used mark to model valuations because of dislocated market conditions, sensitivities are disclosed in section 9.9.2 below, even when such techniques are based on a majority of observable inputs.

When valuation techniques are used, IFRS 7 requires the notes to the financial statements to explain how fair value is determined with more detail including:

- The methods and, when a valuation techniques are used, the assumptions applied in determining fair values of each class of financial assets or financial liabilities;
- Whether fair values are determined, as a whole or in part, directly by reference to published price quotations in an active market or estimated using a valuation technique;
- Whether the fair values recognised or disclosed in the financial statements are determined in a whole or in part using valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument and not based on available observable data. In this case:
  - the total amount of the change in fair value estimated using such a valuation technique, that was recognised in profit or loss during the period, shall be disclosed;

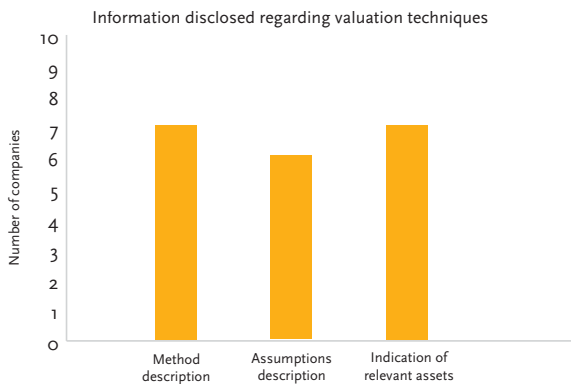
- ▶ if changing one or more of those assumptions to reasonably possible alternative assumptions would change fair value significantly, the entity shall state this fact and disclose the effect of those changes.

In addition, if the market for a financial instrument is not active, the entity establishes its fair value using a valuation technique. It follows that there could be a difference between the fair value at the initial recognition and the amount that would be determined at the date using the valuation technique. In such difference exists, the entity shall disclose, by class of financial instrument:

- ▶ Its accounting policy for recognising that difference in profit or loss to reflect a change in factors (including time) that market participants would consider in setting a price; and
- ▶ The aggregated difference yet to be recognised in profit or loss at the beginning and end of the period and a reconciliation of the changes in the balance.

#### Description of valuation methods:

This must include quantitative and qualitative disclosures that might allow the financial statements' reader to measure the reliability and the volatility of this fair value. The information provided by the parties is shown in the bar chart below:



The information provided remains quite mixed, some stating a simple note about the general principles and others providing more detailed information by type of instruments explaining some assumptions.

# Accounting for financial instruments

In the case of some complex instruments assessed with the assistance of valuation techniques, information provided on the non-observable assumptions seems insufficient for the user to understand the impact of the management judgment. For instance, this is the case for instruments such as CDOs. Their value's determination via a valuation technique relies on the default correlation matrices of underlying assets. In this case, the participants do not specify the non-observable assumptions used to build these matrices.

## **Fair value sensitivity to non-observable parameters:**

Generally, few users provide accurate information concerning sensitivity analysis, on the consolidated result, total assets or shareholders' equity of estimated assets, which have been assessed with valuation techniques based upon non-observable parameters. However, IFRS 7 requires this information to be provided when deemed significant.

There are several issues with regard to the implementation of this requirement. Indeed, we can reasonably wonder about the choice of the parameters to use and the relevance of providing such complex information, sometimes difficult to interpret, in the annual report. Moreover, the information disclosed does not allow comparability between the groups.

## **Variation of fair value based on non-observable parameters:**

The standard also requires the participants to indicate the total amount of the fair value variation, estimated with a model based on non-observable parameters, through the profit or loss of the financial year. Aegon is one of the few parties who has provided this information:

The total net amount of changes in fair value recognized in net income (loss) of the financial instruments of which the valuation technique includes non market observable inputs amount to a pre-tax loss of EUR 1,301 million (2007: EUR 57 million).

## 2 - Information with regard to fair value levels: an increasing proportion of model-based valuation

The standards require the classification of fair value by level and require companies to provide sufficiently detailed information regarding these financial instruments and their respective levels:

	<i>IFRS 7 applicable as at 31/12/08</i>	<i>IFRS 7 after amendments passed in 2009</i>
Level 1	<i>Available prices on active market Prices provided by external sources using available observable market data/transaction on an active market</i>	<i>Available prices on active market Prices provided by external sources using available observable market data/transaction on an active market</i>
Level 2 a	<i>Inactive market - Fair value is model based (using observable market data)</i>	<i>Inactive market - Fair value is model based (using observable market data)</i>
Level 2 b	<i>Inactive market - Fair value is model based (using observable market data)</i>	
Level 3		<i>Inactive market - Fair value is model based (using observable market data)</i>

As at 31 December 2008, IFRS have only identified 2 levels whereas US standards (FAS 157) distinguished 3 levels. An amendment to IFRS 7 was passed at the beginning of 2009 with the intention of harmonising the presentation of both standards while retaining 3 levels.

Some participants have implemented the US framework since 31 December 2008. The presentation made by Aegon within its annual report is an example:

	2008				2007			
In EUR million	Published price quotations in an active market <sup>1</sup>	Valuation technique based on market observable inputs <sup>2</sup>	Valuation techniques not based on observable market data <sup>3</sup>	Total	Published price quotations in an active market <sup>1</sup>	Valuation technique based on market observable inputs <sup>2</sup>	Valuation techniques not based on observable market data <sup>3</sup>	Total
Shares	1,467	841	294	2,602	2,502	1,187	246	3,935
Debt securities	28,753	64,946	1,066	94,765	58,556	39,538	379	98,473
Other investments at fair value	17	746	2,220	2,983	25	1,369	2,109	3,503
Derivatives	34	4,001	(3,099)	936	24	(259)	(610)	(845)
Borrowings	-	845	-	845	-	980	-	980

Seven entities sampled by Mazars have provided the reader with a description of the different levels identified. Some of them go beyond a simple reminder

# Accounting for financial instruments

of the definition of each level provided by IAS 39, clarifying for example the criteria used to consider that the model is based on non-observable data (level 3). Moreover, on this point we note some differences: some rely on the number of non-observable parameters (as soon as a majority is reached, the instrument is classified as level 3) while others consider the weight of these parameters in these instruments' valuation.

We have recently listed the main nature of assets included in each level of fair value:

- ▶ Level 1
  - ▶ Listed shares
  - ▶ UCITS
  - ▶ Government bonds and some corporate bonds
  - ▶ EMTN, mid-term negotiable bonds, Negotiable Treasury Bill
- ▶ Level 2
  - ▶ Corporate bonds on inactive market
  - ▶ Structured products
  - ▶ Shares on inactive market
- ▶ Level 3
  - ▶ Hedge funds
  - ▶ Private equity funds
  - ▶ Some UCITS share
  - ▶ Corporate ABS

It is important to note that some types of instruments are listed under several levels which suggest that the process of determination includes a significant element of management judgment (e.g. private sector bonds). Few groups include disclosures on this subject.

Thus, the main consequence of the market downturn on the information provided as required by the standards is the decrease of asset values calculated by reference to market value (Level 1) and the increasing use of valuation techniques. On average, the percentage of assets relating to level 1 in the hierarchy of fair value has decreased from 77% in 2007 to 69% in 2008 for the groups that have started producing this information since 2007.

The main changes observed from 2007 to 2008 are with regards to corporate bonds and the ABS which have moved from levels 1 to 2 and levels 2 to 3 respectively.

Among the groups that have published this information, we have noted the following developments in disclosure:



We have also noted that the proportion of assets categorised as level 2 and 3 varies with the groups. This difference may indicate a difference in asset portfolio composition as well as a difference in management judgment. At this stage, the information provided in annual reports does not seem sufficient for the reader to be able to conclude on this subject.

# Accounting for financial instruments

## C - FINANCIAL INSTRUMENTS IMPAIRMENT

2008 financial statement reporting was performed during a time of highly volatile financial markets with a strong downward trend.

- Marked widening of credit spreads;



- Marked decline of stock markets ;

	Var 2008 / 2007
CAC 40	-42.68 %
DJ EuroStoxx 50	-44.36 %
S&P 500	-38.49 %
Nasdaq	-40.54 %
Dow Jones	-33.84 %
Nikkei 225	-42.12 %

The issue of impairment of available-for-sale assets was at the heart of the closing accounts process. Understanding and comparability of IFRS results experienced by insurance and reinsurance companies require impairment policies to be relatively homogeneous and comparable. Thus one of the users of financial statements' expectations was transparency on this topic.

### IAS 39 standard and impairment testing:

- An entity shall assess at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. A financial asset or group of financial assets is impaired and impairment losses are incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset and that loss

event has a impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

- The standard gives some examples of objective evidence such as:
  - Significant financial difficulty of the issuer or obligor;
  - Breach of contract such as a default or delinquency in interest or principal payments.
- The standard also specifies the elements that on their own are not necessarily considered as objective evidence :
  - The disappearance of an active market because an entity's financial instruments are no longer publicly traded;
  - The downgrade decrease of an entity's credit rating;
  - The decline in the fair value of a financial asset below its cost or amortized cost.
- However, concerning the shareholders' equity instruments, significant or prolonged decline in the fair value of an investment in an equity instrument below its cost is objective evidence of impairment.

**...nevertheless it leaves a large part to judgment. The preparers of financial statements have seized this opportunity leading to a wide variety of criteria used retained and in the way they are implemented.**

Concerning the shareholders' equity instruments, our analysis highlights that for some groups the information provided does not seem sufficient to allow a comparison within the unrealized losses recorded through profit or loss. This paucity of information applies in terms of methodology relating to the enforcement of the impairment criteria and more specifically whether their implementation is automatic or not.

The information relating to equity instruments, we have identified within the annual reports of the companies selected in the Mazars' sample is presented below:

2007	Selected benchmark											
Unrealised losses for a duration longer	6 months	9 months	3 years	6 months	12 months	ND	12 months and > 20%	6 months	ND	6 months	6 months	
	or	and	or	or	or		or	or		or	or	
			6 months and > 20%									
Unrealised losses	20%	20%	or 80%	ND	30%	ND	50%	20%	ND	20%	20%	

2008	Selected benchmark											
Unrealised losses for a duration longer than	6 months	9 months	6 months and > 20%	6 months	12 months	ND	12 months and > 20%	6 months	ND	6 months and > 30%	12 months	
	or	or	or	or	or		or	or		or	or	
	20%	20%	50%	80%	30%	ND	50%	20%	ND	50%	30%	

# Accounting for financial instruments

Most of the parties among the sample pointed out that when the criteria are reached, the impairment is automatically recorded, as an additional analysis could lead to demonstrate that the decline in the fair value is temporary.

In this regard, the last IFRIC update (May 2009) confirms that it is essential to apply the formula defined automatically by management. It is not possible to create exceptions pointing out the “strategic” attribute of titles meeting the impairment criteria. Moreover, it confirmed that the criteria must correspond to a significant or persistent impairment. These assessments are based on judgment and the entity must disclose in the notes to the financial statements how judgment has been exercised in defining formulae applied. The judgmental approach allows very different methodologies.

Concerning debt instruments, the identification process is not generally subjected to a detailed description. The participants generally specify the nature of the indicators used by referring to the qualitative criteria from the standard...

- Issuer credit incidence;
- Payment default;
- Rating downgrade;
- Disappearance of an active market etc.

...without going into the process and the detailed criteria used to identify the lines which should be subjected to in-depth analysis and potential for impairment.

The information generally available does not allow the reader to assess the level of analysis.

Information related to impairment of available-for-sale investments is a weak point in financial information transparency due to general references leaving significant room for interpretation. As a consequence, the comparability objective of insurance Groups' financial results is questionable.

In the short or medium term, the disappearance of the available-for-sale category through the rewriting of IAS 39 will remove the issue of shareholders' equity instruments' impairment.

# Exposure to financial risks

The gravity of the financial crisis observed during the close of 2008 led insurance and reinsurance groups to disclose, the impact of financial instruments on the financial statements as required by IFRS 7. This information is essential to allow the reader to understand the past and future impacts of the crisis on the financial statements.

## A - IMPACT OF IMPLEMENTATION OF IFRS 7

As a reminder, the objectives of IFRS 7 are the following:

- Highlight the importance of financial instruments and their influence on the company performance;
- Highlight the nature and the potential severity of risks related to these instruments and/or related to insurance operations;

In order to achieve these objectives, IFRS require insurance groups to provide accurate financial information with regards to financial risks (credit, liquidity and market risk) and insurance risks.

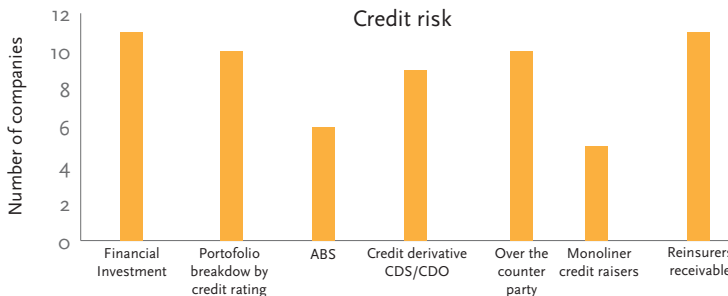
### 1 - Credit risk

Credit risk relates to uncertainty in counterparty's ability to meet its obligations. Special attention was paid to this risk at 31 December 2008 closing date.

We distinguish between two important kinds of counterparty for insurance groups:

- Financial instruments issuers (bonds, derivatives products,)
- Reinsurers' debt

Information required by IFRS7 has been provided globally by companies:



In particular, details have been included with regard to some specific exposures:

- Assets distribution by activity sector and by geographical area and their respective exposure to credit risk;
- Investment limits fixed in the management of credit risk exposure (e.g.: BBB < 5 % of debt instruments, concentration limit in one sector or one given issuer);
- Nature and amount of assets impaired because of counterparty risk and disclosing the variation compared to N-1;
- Information with regards to affected assets such as Asset Backed Securities (breakdown of exposure by underlying asset category, geographical distribution);
- Specifications concerning U.S. subsidiaries disclosing the exposure to assets with high credit risk (sub prime, RMBS).

In general, the information provided with regard to credit risk met the requirement of the standard.

However, these risks are by their nature difficult to quantify and in relation to rating agencies and investors, it is unlikely that the emphasis on this information has noticeably contributed to reassure investors' confidence.

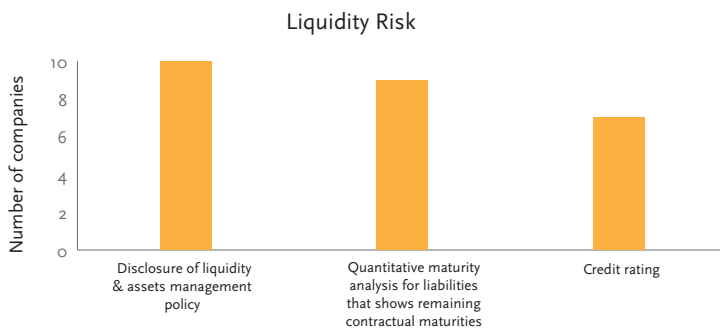
## 2 - Liquidity risk

Liquidity risk refers to the risk that an entity experiences difficulties in relation to meeting its commitments and financial liabilities.

This risk has become sensitive to insurers in case of:

- A significant wave of insurance life contracts buy back;
- The occurrence of catastrophic or one-off events.

Information required by IFRS 7 has again been provided by companies. All the participants present their liquidity risk management plan.



However, there is less information in annual reports relating to IFRS 4 concerning the duration and analysis of maturity date linked to insurance liabilities. The use of information relating to financial assets and liabilities is therefore very limited.

### 3 - Market risk

A sensitivity analysis is required by the standard for each type of market risk:

- A global analysis on the activity exposure to market risk in the risks report;
- A quantitative and qualitative analysis for each kind of market risk.

Quantitative analysis highlights some heterogeneity in indicators used to satisfy this quantitative study (accounting data, MCEV® or EEV, internal models). Nevertheless, we have identified the following trends:

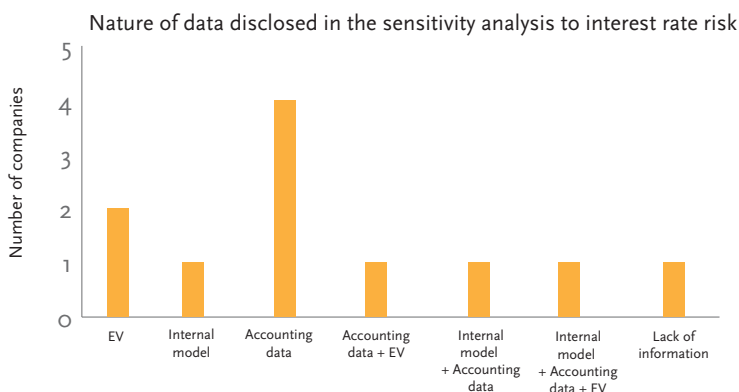
- Interest rate risk: essentially use of accounting data;
- Currency risk: essentially use of accounting data;
- Stock market value risk: combined use of accounting data/EEV or internal model.

#### a) Interest rate risk

Qualitative analysis: some participants include in their analysis of interest rate risk information regarding the terms of interest rate risk management:

- Hedging program of interest rate risk;
- Consequences of interest rate variations (financial income, margins on financial guarantee included in some contracts)

Quantitative analysis highlights some heterogeneity within the indicators used to satisfy this quantitative study:



# Exposure to financial risks

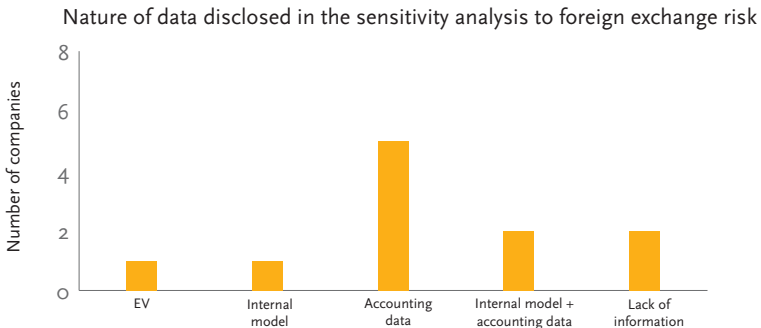
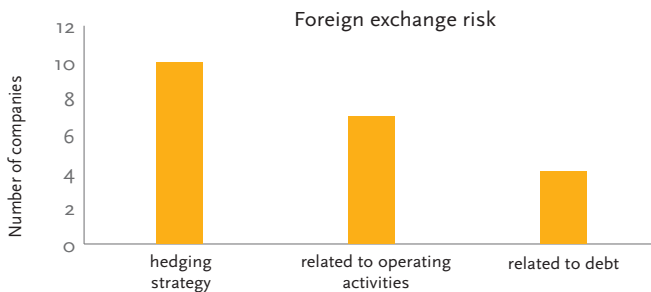
## b) Currency risk

Currency risk is a major risk for groups with worldwide activity in the context of strong exchange rate volatility:

Exchange rate

Exchange rate EUR	31/12/2007	31/12/2008	Var
AUD	1,68	2,21	32 %
CAD	1,44	1,70	18 %
CHF	1,65	1,49	-10 %
GBP	0,73	0,95	30 %
HKD	11,48	10,79	-6 %
JPY	164,93	126,14	-24 %
PLN	3,59	4,15	16 %
USD	1,4721	1,3917	-5 %

Qualitative analysis was addressed in most of the groups analysed by Mazars. However, quantitative analysis is not provided as consistently as for interest rate risk.



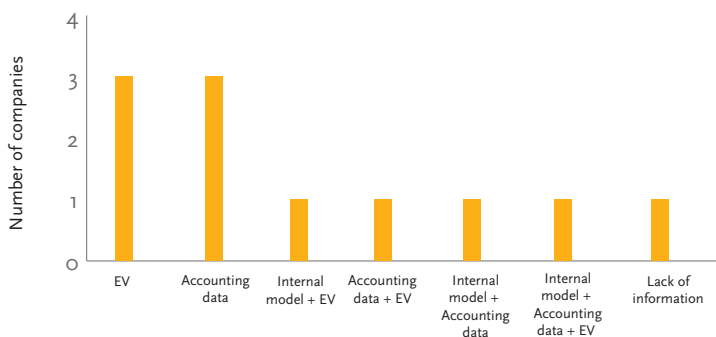
### c) Price risk

From a qualitative point of view, stock market value risk is consistently treated in detail in the context of stock markets at the end of 2008. Some of the groups disclose the following information:

- Stock exposure by activity sector;
- Stock exposure by geographical area;
- Stock exposure by stock index (S&P 500, Nasdaq, FTSE 100);
- Hedge programs (Macro Hedge, Fair Value Hedge).

Quantitative analysis highlighted some heterogeneity within the indicators used to perform this quantitative study:

Nature of data disclosed in the sensitivity analysis to market risk



## 4 - Risk management

Information with regard to risk management is important as far as it allows the reader to analyse the company readings in relation to managing risk.

Groups have generally been very expansive on this matter. Nevertheless the information given does not allow a clear assessment of the processes carried out, often tending towards the theoretical.

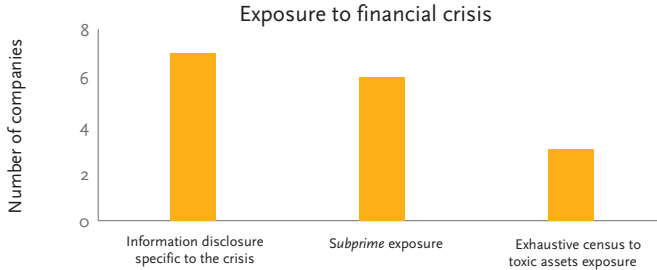
Additional information on some processes would be worth mentioning in order to enhance the understanding of the financial statements. Among them we highlight:

- The process of financial instrument impairment;
- The process of identifying assets subject to greater risk.

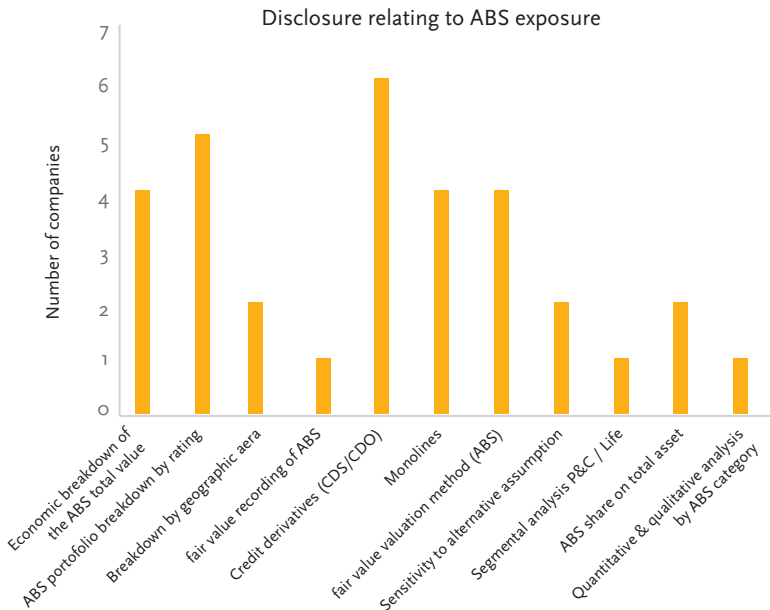
# Exposure to financial risks

## B - DISCLOSURE FOCUSED ON THE FINANCIAL CRISIS

In addition to the information required by IFRS 7, groups have focussed their communication on the various issues raised by the financial crisis.



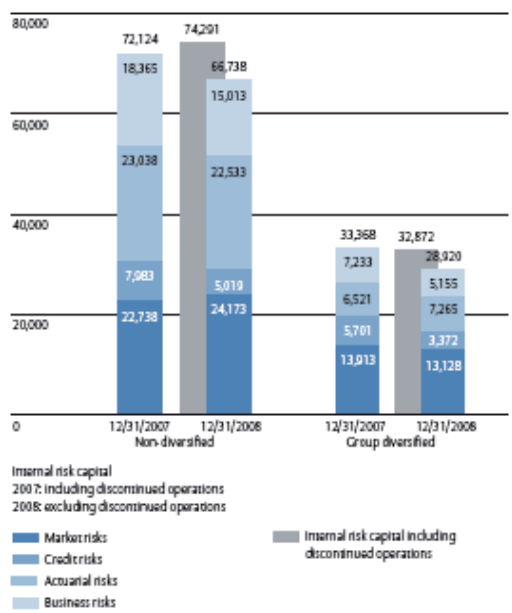
Some provided detailed information concerning their exposure to “toxic” assets as a result of the crisis (Asset Backed Securities, Collateralised Debt Obligations).



For most participants in the sample, the information provided is not only a description of the exposures. Groups aimed at persuading the reader of

their capacity to manage their activity, their assets contingent on the risks they represent and understand. Risk management is an issue discussed in depth by each participant. However, only a few specified the detail of their risk management. Some of them describe this subject by linking risk to capital (in the manner of Solvency II) and by introducing the “internal risk capital” as a risk management tool:

**Allocated internal risk capital by risk category**  
 (total portfolio before minority interest)  
 in € mn



# Information regarding key indicators

Against the background of stressed and volatile markets, we have focused on a few indicators within the financial information:

- The solvency margin as a measure of financial strength;
- The Embedded Value as a measure of a group economic value.

## A - SOLVENCY MARGIN: A DIFFICULT INDICATOR TO COMPARE

### 1 - Definition and regulatory framework

For an insurance group, capital adequacy is assessed with the help of the ratio of adjusted or consolidated solvency. This ratio calculation was made compulsory by the European Directive of 27 October 1998 and relies on "Solvency I" principles:

Solvency ratio = (margin components) / (margin to set up).

In addition, IAS 1 revised specifically required the following information to be provided to the reader of financial statements:

- When an entity is subject to capital requirement according to external regulation, this entity must describe the nature and the way this requirement will be integrated into capital management;
- The quantitative summarised data concerning the items included in the capital management;
- Demand on capital and the consequences in case capital requirements are not met.

### 2 - Calculation method and large aggregates

#### a) Margin's components

The items which constitute the margin relate to a consolidated view of admissible assets with the starting point being shareholders' equity. Admissibility rules are set by each local regulator.

The main aggregates for the items mentioned above by the legislation in force are the following:

- IFRS shareholders' equity (share of the group) excluding intangible assets, portfolio value and net assets of financial service entities;
- Unrealised gains, excluding exceptional, not included in IFRS shareholders equity;
- Minority interests' share of the requirement;
- Subordinated debt;
- Others items recognised as admissible by the local regulator e.g. future gains.

**b) Margin required**

The assessment of margin required relies on the disparate local prudential regulations looking toward the implementation of Solvency II.

**c) Consequences for comparability**

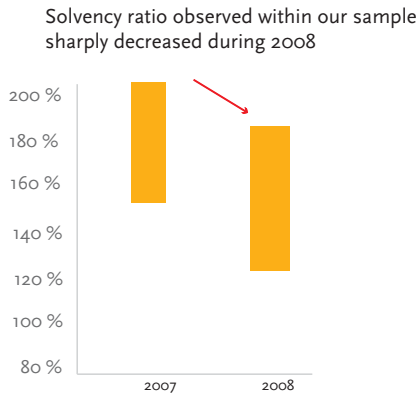
Differences in the recognition of margin components arise from local prudential regulations. These prudential regulations are not consistent with respect to issues having a material impact on the solvency margin calculation such as intangible assets (deferred acquisition costs,...), profit sharing reserves, future profits...

In general, the information provided does not allow the determination of potential adjustments necessary to reach a homogenous view on these subjects.

**3 - Information provided by groups as at 31 December 2008**

During the crisis, the solvency margin is considered as a sensitive indicator as it is a means of communicating the financial strength and the potential risk of dilution of shareholder value. As a consequence, the solvency margin has been used as one of the main tools of communication for the 2008 close.

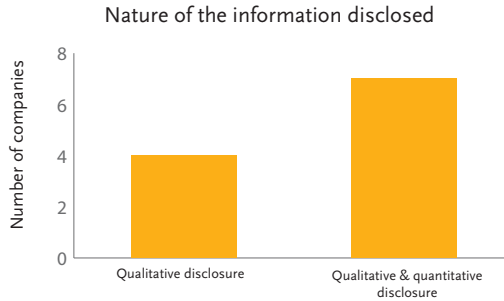
Solvency ratio observed within our sample sharply decreased during 2008:



We have observed a 30 basis point average decrease in 2008, mainly due to the drop of equity markets and to the widening interest rate spread during the second half of the year.

Beyond the disclosure of this ratio, the level of additional information provided appears heterogeneous:

# Information regarding key indicators



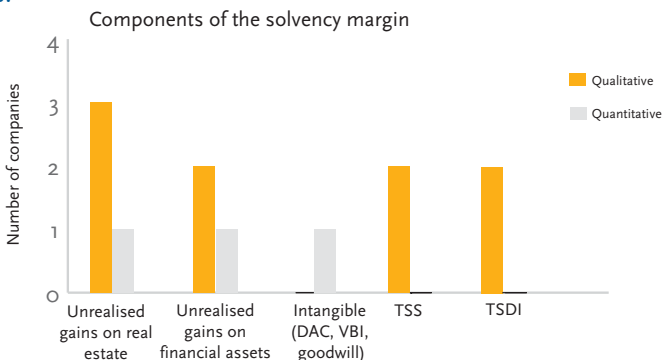
## a) Numerous qualitative information disclosures

Qualitative information is generally quite detailed. The main disclosures are the following:

- The role of risk management and strategic management;
- Consequences of an insolvency and anticipated action plan if required;
- Applicable regulatory framework in the main geographical areas affected by the group activity;
- Hedging strategy established to limit the market impact on the solvency ratio;
- If the financial crisis continues, consequences on the level of the solvency margin and action plan established according to the situation.

## b) Limited quantitative information

Few groups gave a detailed composition of components or the way they were determined. Quantitative information mainly related to the following indicators:



Information relating to the assessment ratio sensitivity was limited to the main economic and market indicators.

Nevertheless, some of them showed a variation equivalent to a 100 basis point interest rate increase or a 10% equity market variation. Others disclose these sensitivities during the presentation of these results to analysts. For example:

+10% / - 10% Equities: +/- 3 pts	+10% / - 10% Real Estate: +/- 6 pts
+1% default Fixed Income: - 3 pts	+10% / - 10% Private Equity: +/- 2 pts

Regarding the margin required: either little detail is communicated with regards to the computation, or the computation method is disclosed without any additional information concerning implementation provisions.

Few participants disclosed quantitative data concerning the main aggregates making up constituent components of the margin:

The Group's solvency as of December 31	in USD millions, as of December 31	
	2008	2007
Eligible equity		
Total equity	23,781	29,318
Net of intangibles, other assets and free reserves for policyholder dividends	(3,966)	(2,915)
Subordinated debt <sup>1</sup>	3,683	3,975
Deferred policy acquisition costs general insurance	(3,571)	(3,394)
Dividends, share buy-back and nominal value reduction <sup>2</sup>	(1,411)	(3,867)
Total eligible equity	18,516	23,117
Total required solvency capital	12,142	12,383
Excess margin	6,375	10,734
Solvency ratio	153%	187%

In relation to the comparability issue mentioned, disclosure around this indicator deserves enhancement as we, look forward to the implementation of Solvency II.

## B - EMBEDDED VALUE: CONSISTENCY OF METHODOLOGY NEEDING TO BE IMPROVED

### 1 - Definition

Embedded value is a key financial performance indicator presented as a complement to the financial statements.

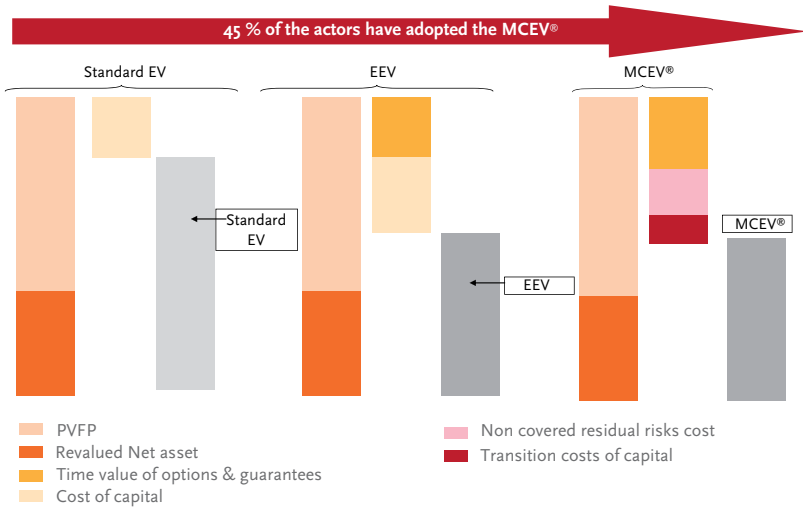
This is information suggesting value creation for the shareholder since it includes:

- The discounted value of future cash flows returning to the shareholder;
- The new business value;
- The development of available capital.

It appears as a link between IFRS Phase 1 and the evolution of Solvency II/

# Information regarding key indicators

IFRS Phase 2. The regulatory framework of embedded value is changing as a consequence of the CFO Forums impact:



## 2 - Financial reports significantly impacted by the 2008 financial crisis

At the 2008 year end, embedded values have been severely impacted by:

- ▶ Decreases in unrealized gains;
- ▶ Decreases in risk free rate;
- ▶ Increase in corporate risk premiums;
- ▶ Gap of approximately 276 basis points on the Iboxx index;
- ▶ Increase of equity & rate markets' volatility.

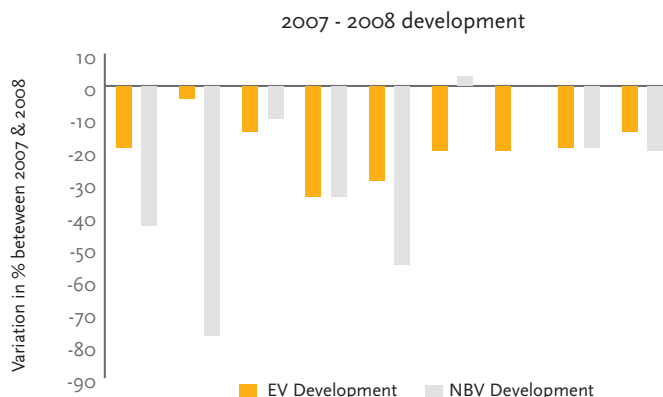
As a consequence, adaptations in the approach have been observed with the introduction of a liquidity premium for various insurers, in addition to the risk-free yield curve or adaptations on volatility of shares and interest rates.

Impacts of these adaptations have been clearly identified by some of the groups in our sample (extract from Allianz report on EEV):

**Exhibit 8b: Additional Sensitivities**

	In-Force	
	MCEV EUR mn	MCEV %
<b>Central Assumptions</b>	<b>12,545</b>	<b>100%</b>
<i>EV change to Credit Spreads for Allianz Life US only</i>		
Narrowing of credit spreads by 100bp	1,498	12%
Narrowing of credit spreads by 200bp	2,828	23%
Narrowing of credit spreads by 300bp	4,207	34%
<i>EV based on government bond rates instead of swap rates for Allianz Italy and New Europe only</i>		
	313	2%
<i>EV change to Year end volatilities Volatilities as of 31 December 2008</i>		
	-5,202	-41%
<i>EV mark to model based on an increase in reference rates, see text below 50bp on Europe and 100bp on US</i>		
	4,708	38%

At the end, the decrease in Embedded Values and Net Book Values remain severely impacted:



### 3 - A reference yet to be established

The establishment of the group MCEV®, including IFRS net asset value for non life activities notably, has raised many questions related to the potential adjustments to IFRS accounts.

Moreover, the determination of the time value of options and guarantees raises some reservations with regard to its volatility and for its little understood and lack of detailed mechanisms.

# Information regarding key indicators

---

These elements highlight the nature of embedded value as an indicator yet to be widely recognised. The relevance and the future credibility of this indicator will depend on:

- ▶ The objective of homogenisation;
- ▶ Its consistency with expected accounting and prudential developments (IFRS Phase 2 and Solvency II).

Our analysis of 2008 annual reports published by large European insurance groups highlights significant improvements with regard to the financial information in so far as we have noticed that:

- ▶ Financial information has been noticeably enhanced with regard to risk assessment;
- ▶ Key topics have been treated transparently by some of the Groups.

Moreover, insurance Groups rarely used the reclassification opportunities brought by the amendment to IAS39, avoiding further difficulties in comparability of their financial statements.

However, we have noticed that the reading of insurance groups' financial statements is becoming increasingly complex and a comparison exercise between these groups is difficult. In addition, related performance indicators, such as MCEV®, have appeared to be (sometimes more) pro-cyclic than IFRS phase 1.

The stakes for 2009 seem important again in the light of a will for standardisation. The IAS 39 revision project (even if it is not effective at the year end) and ongoing discussions should bring forward the outlook regarding essential accounting and financial assets valuation issues.



**Gilles Magnan**

[gilles.magnan@mazars.fr](mailto:gilles.magnan@mazars.fr)

Tel: (+33) 1 49 97 64 62

**Contacts:**

**Germany: Lars Pralle**

[lars.pralle@mazars.de](mailto:lars.pralle@mazars.de)

Tel: (+49) 211 83 99 409

**France: Maxime Simoen**

[maxime.simoen@mazars.fr](mailto:maxime.simoen@mazars.fr)

Tel: (+33) 1 49 97 67 85

**Italy: Antonia Di Bella**

[antonia.dibella@mazars.it](mailto:antonia.dibella@mazars.it)

Tel: (+39) 02 58 20 13 96

**The Netherlands: Kees Hartevelde**

[kees.hartevelde@mazars.nl](mailto:kees.hartevelde@mazars.nl)

Tel: (+31) 102 77 15 76

**The United Kingdom: Andrew Heffron**

[andrew.heffron@mazars.co.uk](mailto:andrew.heffron@mazars.co.uk)

Tel: (+44) 20 70 63 44 35

**Switzerland: Lionel Cazali**

[lionel.cazali@mazars.ch](mailto:lionel.cazali@mazars.ch)

Tel: (+41) 44 384 84 37

**Spain: Enrique Sanchez**

[esanchez@mazars.es](mailto:esanchez@mazars.es)

Tel: (+34) 915 62 40 30