

Report on issues regarding the valuation of structured credit products

Table of contents

Executive Summary	2
1. Background	3
2. Introduction	4
3. Valuation of assets and liabilities under the Solvency II framework.....	6
A. Solvency principles for the valuation of assets and liabilities.....	6
B. Use of IFRS in the Solvency II framework.....	7
C. Technical specifications for QIS4 and CEIOPS' future work at Level 2	8
4. Issues highlighted by the market turmoil	9
A. Valuation issues.....	9
When is a market active, when is it inactive?.....	10
When is a price in a specific transaction deemed not to be fair value because the transaction is forced or distressed?	11
How are inputs in a valuation technique (mark-to-model) selected?.....	11
B. Disclosure issues.....	12
IFRS Framework	13
Solvency II framework.....	14
C. Monoline insurance undertakings.....	16
D. Risk management and governance issues	17
Annex Extracts from the Solvency II Framework Directive Proposal	19

Executive Summary

The European insurance industry has had a limited role in the origination and dispersion of the structured credit products that have been a significant factor in the current market turmoil. A small number of monoline insurance undertakings in Europe have provided guarantees to investors in some structured credit products.

With the exception of monoline insurance undertakings, the primary impact on insurance undertakings is as investors in structured credit products. This impact is not comparable to the banking sector due to a different business model, differing liability durations and differing exposures to customer behaviour. Insurance undertakings are facing valuation challenges due to the current market turmoil, and undertakings and supervisors must remain vigilant.

This report is focused on the impact for insurance undertakings arising from issues related to the valuation of structured credit products, especially illiquid ones, in the future Solvency II framework and under IFRS.

The following points summarize the main issues highlighted in this report:

- The economic balance sheet approach followed under Solvency II is the most useful basis for prudential supervisors even in adverse market situations.
- The setup of the IASB expert panel on valuation issues is strongly supported by CEIOPS.
- CEIOPS considers the establishment of further guidance for the definition of an active market, forced or distressed sales, selection of inputs in valuation techniques and appropriate disclosure requirements should be of high priority for the newly established IASB expert panel.
- Consistency in the use of valuation techniques is of high importance when considering the reliability of the valuation of illiquid financial instruments especially when marking assets to model. Also the relevance of model valuations as back testing of market prices in illiquid market conditions is a key issue for valuation purposes.
- Appropriate disclosure requirements concerning valuation approaches and uncertainties connected with these could reduce the negative impact of such adverse market situations.
- Robust governance and risk management arrangements within undertakings are also necessary and deserve further specifications.

Beyond these considerations, CEIOPS recalls that the economic valuation of assets and liabilities for prudential purposes is only the starting point for the assessment of the solvency position of insurance undertakings. It is expected that undertakings will identify all risks and uncertainties – in particular those not considered in the fair valuation exercise – in their Own Risk and Solvency Assessment (ORSA) and report them to the supervisors. Stress testing economic valuations will form an essential part of this risk assessment.

1. Background

- 1.1 In its meeting of 14 May 2008, the European Council has approved three updated roadmaps, one of them regarding the actions taken in response to the financial turmoil.¹ This follows up on the endorsement by ECOFIN, in October 2007, of a roadmap for action taken in response to the financial turmoil, which identified four main areas of priority in response to the turmoil, i.e. (i) improving transparency, (ii) valuation of financial products, (iii) strengthening prudential requirements and (iv) making markets function better.
- 1.2 The updated roadmap requests CEIOPS, among other institutions, to assess the deployment of sound asset valuation standards in non-bank investors (e.g. asset managers, pension funds etc), particularly in relation to (potentially) illiquid assets (at EU-level: auditing profession, industry, CEIOPS, CESR and the Commission; at global level: IASB, IOSCO, BCBS). The deadline for this work has been anticipated from the third quarter of 2008 to mid-2008. At the heart of this request are suggestions by some to depart from accounting valuation rules based on market prices, which are viewed as pro-cyclical and seen as aggravating the crisis by creating a vicious cycle of asset write-downs and distressed sales of assets. Others consider that such an approach could be highly counterproductive and that, to restore confidence, it is essential that investors are properly informed on the basis of as complete disclosure as possible and that there should be no deviation from IFRS standards towards more subjective valuation estimates by undertakings.
- 1.3 The ECOFIN Financial Markets Stability Roadmap also requests CEIOPS as well as other stakeholders to reinforce prudential rules and risk management in the financial sector. A particular request is that CEIOPS and others assess the level of risk management standards in non-bank investors (e.g. asset managers, pension funds etc), particularly in relation to (potentially) illiquid assets. CEIOPS plans to address risk management issues through a separate paper to be published in early autumn of this year.
- 1.4 This report represents CEIOPS' response to ECOFIN and sets out preliminary observations and conclusions in relation to the valuation issues raised in the context of the market turmoil i.e. the valuation of structured credit products or illiquid assets.
- 1.5 In its work, CEIOPS is liaising with CEBS and CESR who are conducting work on valuation issues in light of the financial crisis as well. Following their sectoral analysis, the three Committees will decide on any need for cross-sectoral activities in this respect.²

¹ Financial Markets Stability Roadmaps, 9056/1/08 REV 1, Brussels, 15 May 2008, see http://www.eu2008.si/en/News_and_Documents/download_docs/May/0514_Svet_ECOFIN/030financial_stability_roadmaps.pdf.

² The draft 3L3 Work Programme 2008 contains the following in this respect:
"Fair valuation of securities is based either on market value or modelled value. The recent turbulences show the need to perform some research on how valuation is being performed in financial institutions, and the relevance of cross-sector assessment of this issue. The three Committees will join forces to analyse the cross-sector dimension to valuation, from both the prudential and the investor protection perspective."

2. Introduction

- 2.1 Since August 2007, financial markets have faced some instability caused by a combination of macro- and micro-economic factors. At the heart of the turbulence was the so-called "originate and distribute" business banking model which allowed financial institutions to transfer credit risks of various quality to different investors who were in search of higher returns and access to diversified investments. The credit transfer is made possible through different techniques, notably the securitization of a large number of individual retail or commercial credits of different quality (structured credit products) and the distribution of the securities to market participants. Structured credit products include Asset Backed Securities (ABS), Collateralised Debt Obligations (CDO), Collateralised Loan Obligations, Collateralised Mortgage Obligations, Residential Mortgage Backed Securities, Commercial Mortgage Backed Securities, Asset Backed Commercial Paper and other similar packaged securities.
- 2.2 Complexities introduced in the process were not always accompanied by increased transparency on the overall risks of the structured credit products. When part of the underlying credit risks (mortgage loans on the sub-prime credit markets in the US) start to emerge, the weaknesses hit the different structured credit products and, by contagion, other structured credit products and even other financial markets.
- 2.3 The turmoil was characterised by sharp falls in prices or values of these structured credit products amid continuously reduced liquidity in the market for these products. In this deteriorating environment, it often became more difficult to measure reliably the value of financial instruments linked to credit transfers and to manage these investments.
- 2.4 At this stage, it is important to recall that, with the exception of monoline insurance undertakings, of which there are a few (see section 4.C), the role of the European insurance industry in the origination and the dispersion of the affected products is rather limited as insurance undertakings have not typically originated retail or commercial debts. The crisis hit insurance undertakings as investors in structured credit products, i.e. impacted only part of their assets' side, and therefore caused valuation issues (for both prudential and public reporting purposes) as well as concerns regarding undertakings' policies and processes for managing risks and investments. It should also be noted that the impact on the insurance sector is not comparable to that on the banking sector due to the different business models, differing durations of liabilities and differing exposures to customers' behaviour. That does not mean that insurance undertakings are not facing liquidity shortcomings resulting from the turmoil, but these concerns present a different structural problem.
- 2.5 In fact, insurance undertakings are mainly affected through the secondary effects i.e. the value of their investment portfolios. As stated in the following paragraphs, the primary effects through the direct investments in subprime exposures by insurers seem, for the time being, rather limited in terms of the percentage of total assets.

- 2.6 As part of its supervisory work regarding the Financial Turmoil of 2007, CEIOPS conducted a research analysis on the situation of European insurance undertakings and the effects of the turmoil on them. This work included a qualitative report prepared in December 2007, complemented, in March 2008, by a quantitative analysis of insurers' investments in structured credit products and their exposure to subprime-related risks. This analysis was updated in June 2008. For the purpose of the analysis, CEIOPS collected quantitative exposure data from a wide coverage of insurance supervisors with reference to the most recently available quarterly reporting date. On the basis of the data received the main findings confirm that the total net exposure to structured credit products was rather limited.
- 2.7 These findings further indicate that overall the European insurance sector still remains partially exposed to the credit turmoil but, as mentioned above, only to a limited extent. The extent to which non-life insurance undertakings are subject to related insurance claims over the coming months, such as from 'errors and omissions' or 'directors' and officers' insurance policies for example, has yet to be determined. The claims may take a number of months to surface.
- 2.8 It is worth mentioning that at present in most Member States strict quantitative limits are legally imposed on investments, thereby limiting undertakings' freedom in terms of choices between investment opportunities. Solvency II will instead introduce the prudent person principle which will mean that insurance undertakings will have to ensure the establishment of internal limits on certain types of risks in line with their overall risk management (see also section 5.D on risk management and governance issues).
- 2.9 This report is focused on the impact for insurance undertakings arising from issues related to the valuation of structured credit products. It takes into account the latest developments in the Solvency II project and in International Financial Reporting Standards (IFRS). The report does not cover occupational pension funds whose approaches to the valuation of assets and liabilities are governed by a separate set of rules based on a prudent person principle under the IORP Directive (2003/41/EC).
- 2.10 In light of the above, this report presents a number of current issues being considered regarding the use and application of economic valuations in the context of the future Solvency II prudential framework for insurance undertakings (section 3). This report then analyses the main issues highlighted by the market turmoil in relation to the valuation of illiquid assets and the resulting concerns in terms of public disclosure (section 4.A and B). Next, the report covers the specific issues posed by monoline insurance undertakings (section 4.C). Finally this report explores the lessons to be drawn from the turmoil in the area of risk management, management of investments made by undertakings and governance.

3. Valuation of assets and liabilities under the Solvency II framework

A. Solvency principles for the valuation of assets and liabilities

- 3.1 Under the risk-based approach underlying Solvency II, capital requirements are determined by taking into account all material risks faced by insurance undertakings. An important component of this approach is to assess the risk of loss in the value of assets and liabilities held by undertakings. A proper and reliable valuation of insurers' assets and liabilities is therefore of paramount importance as it provides the basis for the assessment of risks and in the determination of capital requirements.
- 3.2 Other aspects of Solvency II are also impacted by the quality of the valuation of undertakings' assets and liabilities. For example, on the one hand, it informs the internal and external assessment of compliance with Solvency II requirements regarding investments made by undertakings (in particular the principle that investments must be made, managed and monitored in accordance with the "prudent person" principle). In addition, the valuation of assets and liabilities is also of high importance for a proper functioning Pillar III regime under which undertakings will be required to disclose information on their solvency and financial condition thereby enabling market discipline to be exercised with full knowledge. General purpose accounting principles followed by undertakings will play an important role under Pillar III.
- 3.3 The Solvency II Framework Directive Proposal³ sets out a number of high level principles for the valuation of assets and liabilities. These principles are set out in draft Article 74. In substance, the Framework Directive Proposal requires solvency assessments to be made on economic, market-based valuations of all assets and liabilities.
- 3.4 Articles 75 to 78 of the Framework Directive Proposal also set out key requirements for the valuation of technical provisions under the concept of economic valuation, consistently with information provided by financial markets. However, this paper deals only with issues relating to the valuation of assets and liabilities other than technical provisions.
- 3.5 CEIOPS has been requested by the European Commission to provide advice on possible implementing measures for the Framework Directive (future Level 2 measures) regarding methods and assumptions to be used in the valuation of assets and liabilities for solvency purposes. CEIOPS has already begun working on these issues in the framework of its fourth quantitative impact study under the Solvency II project (QIS4).⁴

³ Amended Proposal for a Directive of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (Brussels, 26.2.2008, COM(2008) 119 final, 2007/0143 (COD)), see http://ec.europa.eu/internal_market/insurance/docs/solvency/proposal_en.pdf

⁴ See section 3.C.

B. Use of IFRS in the Solvency II framework

- 3.6 In the implementation of Solvency II, a key question will be the consistency of the IFRS definitions of fair value with the requirements of Solvency II. Also solvency valuation guidance for undertakings that do not use IFRS will need to be addressed.
- 3.7 It has been an aim of the Solvency II project to build on the same measurement principles, as far as possible, as those applied in the public accounts, so as to limit the administrative burden on insurance or reinsurance undertakings.⁵
- 3.8 The Framework Directive Proposal stipulates that assets and liabilities have to be measured at their economic value with the exception that own credit standing must not be taken into account in the measurement of liabilities.
- 3.9 For insurance undertakings that use IFRS, most assets and liabilities, apart from insurance liabilities, are subject to IFRS that allow fair value measurement. Hence, so far, there is to a significant extent harmonisation between the measurement principles in IFRS for financial instruments and the ones stipulated for the measurement of assets under the Solvency II regime.
- 3.10 Should CEIOPS decide to use or refer to IFRS valuation principles, it will become important that not only the principles but also guidance and practices are the same. CEIOPS does not therefore recommend developing specific guidance on how to apply fair value in insurance undertakings for solvency purposes different from the general guidance applicable within the accounting framework.
- 3.11 As most undertakings still have to report their annual accounts according to national GAAP, it should be kept in mind that for a majority of insurance undertakings the application of IFRS itself represents a challenge. Due care will therefore have to be taken in the determination of the valuation guidance to be used for solvency purposes by undertakings that continue to use national GAAP.
- 3.12 In all cases, CEIOPS will base its advice on the Framework Directive Proposal's principle that all assets and liabilities need to be assessed on the basis of their economic value, even assets and liabilities that are not measured in the same manner under IFRS.
- 3.13 CEIOPS will at a later stage⁶ consult with market participants on the possible use of IFRS principles and guidance for the valuation of assets and liabilities by all undertakings. Preliminary views on these issues are however welcome.

⁵ See Recital 28 of the Framework Directive Proposal.

⁶ i.e. when publishing for consultation, in spring 2009, its draft Advice to the European Commission on implementing measures to set out the methods and assumptions to be used in the valuation of assets and liabilities.

3.14 Some issues could be of major importance when trying to find a Solvency II consistent valuation basis for financial instruments affected by the recent market instability such as:

- Adopting specific rules to consider credit and liquidity characteristics of assets and disallowance for own credit standing in liabilities respectively. Effects of the own credit standing on the value of liabilities must therefore be eliminated, even if the value of a liability is based on a readily observable market price; these effects also include changes in the credit standing affecting the insurance industry as a whole (e.g. an industry-wide increase of credit spreads).
- Finding the right balance between IFRS-consistent fair valuation and the credit and liquidity aspects and model risks as referred to in the Framework Directive Proposal.
- Defining the valuation of assets and liabilities in volatile market conditions, especially relating to more complex financial instruments (e.g. structured credit products). This is strongly related to the use of a mark-to-model valuation.

C. Technical specifications for QIS4 and CEIOPS' future work at Level 2

3.15 In preparation of the introduction of Solvency II the European Commission, together with CEIOPS, carries out quantitative impact studies (QIS) for European insurance undertakings. These QIS exercises serve as validation tests for the future solvency capital requirement calculations and as a preparatory measure for undertakings.

3.16 Currently the fourth quantitative impact study (QIS4) is under way. The technical specifications⁷ published in April 2008 contain, among several other issues, rules for the valuation of assets and liabilities. Insurance undertakings are expected to submit their results by 7 July, insurance groups by 30 July 2008. The final results of this exercise are intended to be presented at CEIOPS' next Annual Conference in Frankfurt on 19 November 2008. The QIS4 results will have major influence on the final design of the Solvency II regime as it is the last QIS before adoption of the Framework Directive.

3.17 In line with the Framework Directive Proposal, the following hierarchy of high level principles was proposed for the valuation of assets and liabilities under the fourth quantitative impact study of Solvency II (QIS4):

- (i) Wherever possible, an undertaking must use mark-to-market methods in order to measure the economic value of assets and liabilities;
- (ii) Where this is not possible, mark-to-model procedures should be used (marking to model is any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input). When marking to model, undertakings will use possible observable and

⁷ QIS4 Technical Specifications (MARKT/2505/08), Annex to Call for Advice from CEIOPS on QIS4 (MARKT/2504/08), Brussels, 31 March 2008, see <http://www.ceiops.eu/content/view/118/124/>.

market consistent inputs; models shall make maximum use of market inputs (e.g. the yield curve or observed transaction prices of similar instruments). Departures from fair values contained in audited financial statements based on IFRS will only occur in rare cases and must be justifiable.

- (iii) Undertakings may opt to follow the guidance in the tables annexed to the technical specifications² to determine where the treatment under IFRS is considered an allowable proxy for economic value for the purposes of QIS4. Where possible, this guidance may also be applied to local GAAP;
- (iv) Under the following circumstances national accounting figures may be used (even though these might not reasonably be regarded as a proxy for economic value):
 - where an undertaking can demonstrate that an asset or liability is not significant in terms of the financial position and the performance of the entity as determined under the applicable financial reporting framework and the solvency assessment. (Participants should refer to the materiality principle set out in their applicable financial reporting framework to determine what is deemed significant or not, and apply the same principle for solvency purposes);
 - when the calculation of an economic value is unjustifiable and impractical in terms of the costs involved and the benefits derived.

3.18 Taking into consideration the market-consistent approach stated in the Framework Directive Proposal as well as in the technical specifications for QIS4 the outcome could approximate an economic balance sheet.

3.19 Analysis of QIS4 results will provide useful feedback on the difficulties encountered by undertakings in the application of the technical specifications and will inform the future development of possible Level 2 implementation measures for the valuation of assets and liabilities.

4. Issues highlighted by the market turmoil

A. Valuation issues

4.1 The main valuation issues observed in the context of the market turmoil were related to the determination of fair value in the context of IAS39 *Financial Instruments: Recognition and Measurement*.

IAS39 defines Fair value as "the amount for which an asset could be exchanged, or a liability settled, between knowledgeable and willing parties in an arm's length transaction".⁸ IAS39 further states that "the best evidence of fair value is quoted prices in an active market. If the market for

⁸ IAS39 Definitions, Para. 9

*a financial instrument is not active, an entity establishes fair value by using a valuation technique”.*⁹ Even when a valuation technique is used, the objective remains to “*establish what the transaction price would have been on the measurement date in an arm’s length exchange motivated by normal business considerations*”.¹⁰

- 4.2 These provisions are usually understood as meaning that fair values are determined within a hierarchy of methods applied depending on the circumstances. If the asset (or liability) is traded in an active market, the quoted price on this market is the best evidence of the fair value (mark-to-market) and should, consequently, be recorded as such in the accounts.
- 4.3 If the market is not active the fair value is determined by a valuation technique with inputs derived, as far as possible, from current market transactions (mark-to-model).
- 4.4 It is important to stress that it is not up to the undertaking to opt between mark-to-market and mark-to-model. The method applied has to be determined by the circumstances and needs to be fully justified, i.e. by whether there is an active market for the asset (or liability) or not.
- 4.5 In a number of cases, however, difficulties have been observed in the application of the IAS39 principles. Some of these difficulties are discussed below:

When is a market active, when is it inactive?

- 4.6 One major issue is to determine whether a market is still active. IAS39 (AG 71 to 73) provides a number of criteria to this end, but does not address situations where the market continues to be active, but with such reduced liquidity that the relevance of the observed quotes could be questioned in light of the overall IAS39 definition of fair value (as stated above).
- 4.7 Determining the relevance of quoted prices is also a key issue for preparers of financial statements in the absence of an organised and regulated market.
- 4.8 The IASB could usefully clarify in this regard whether and to what extent undertakings could resort to valuation techniques in addition to, or in place of, quoted market prices with a view to determining a more reliable amount for which an asset could be exchanged, or a liability settled, between knowledgeable and willing parties in an arm's length transaction.
- 4.9 When determining improved guidance, consideration should be given to the principle of consistency.
- 4.10 Currently the valuation of most structured credit products requires a model valuation. Whenever a liquid or active market for the underlying instruments exists, model results may still need to be used to test the market prices and vice versa. Thus, there should be a smooth transition

⁹ IAS39, Para. 48A

¹⁰ IAS39, Para 48A

from a mark-to-market valuation to a mark-to-model valuation. A clear line between these two valuation techniques is very hard to draw, as the complexity of such products demands sophisticated valuation techniques in any case. In this context, the point is to know whether IAS39 offers enough flexibility to reporting firms to maintain this approach for complex financial instruments, in particular under stressed market conditions, bearing in mind that the IAS39 definition of fair value may be better served by marked-to-model than by relying on quotes or market prices only.

When is a price in a specific transaction deemed not to be fair value because the transaction is forced or distressed?

4.11 IAS39, AG69 indicates that fair value is not *"the amount that an entity would receive or pay in a forced transaction, involuntary liquidation or distress sale."* Applying this principle may also prove to be difficult particularly in stressed market conditions, i.e. to determine clearly whether observed prices reflect distressed or forced sales. For example, a transaction could – because of a lack of market transparency – represent a forced transaction, involuntary liquidation, or distress sale from the perspective of one entity. From the perspective of another entity the same transaction represents a market price in an active market and will not be adjusted by the second entity.

4.12 Thus, in some market scenarios more guidance about the determination of a forced or distressed sale would be needed as well as guidance on the concepts to follow when doing so.

How are inputs in a valuation technique (mark-to-model) selected?

4.13 A third series of issues relate to the determination of inputs to be used in a valuation technique.

4.14 One major consideration for assessing valuation techniques in adverse market situations is consistency. In illiquid situations an undertaking should stick to the models used when markets were more active. A change in the valuation model due to a change in market activity does not generally seem to be acceptable because it contradicts with the consistency of accounting policy. This situation may however be unavoidable.

4.15 Furthermore, a second major point is that valuation models need to be well informed and validated. Especially proper back testing and stress testing of model results seems to be an important factor. A suitable validation of a model is only achievable through regular comparison with other valuations (from other institutions). Any significant differences with other models often flow from different market parameters. Therefore the comparison of model results provides information about the sound use of market parameters.

4.16 IAS39, AG82 provides a non-exhaustive list of risk factors to be taken into account when determining a fair value. The market turmoil highlighted the fact that additional risk factors exist and may need to be considered, i.e. liquidity risks, counterparty risks, and correlation risks. It would be useful

to have further indications from the IASB on whether the non-entity-specific part of these risks should be considered for determining fair value.

4.17 A principle-based set of accounting rules must inevitably rely on the fact that answers to such questions are derived from the professional judgment exercised by the individual preparers of accounts. However, there could be room for further general guidance based on the recent experience gained through the subprime crisis.

4.18 In this context CEIOPS supports the recommendations made by the Financial Stability Forum (FSF)¹¹ that international standard setters should enhance accounting, disclosure and audit guidance for valuations. CEIOPS is therefore pleased to see the recent initiative by IASB to form an expert advisory panel to discuss the valuation of financial instruments in inactive markets. CEIOPS is looking forward to seeing the results of the discussions between the experienced preparers and regulators in this group.

4.19 Beyond these considerations, CEIOPS recalls that economic valuation of assets and liabilities for prudential purposes is only the starting point for the assessment of the solvency position of insurance undertakings. It is expected that undertakings will notably identify all risks and uncertainties – in particular those not considered in the fair valuation exercise – in their Own Risk and Solvency Assessment (ORSA) and report them to the supervisors. These risks should cover both, entity-specific and portfolio-specific aspects. Examples of such risks are: whether the level of liquidity of the position compared to the level of the liquidity available on the market is comparable, diverging pricing information coming out of back-testing compared to quoted prices, divergences in observed quoted prices, counterparty and model risk. Against this background, CEIOPS wishes to stress that economic values must be consistently determined by reference to a given definition of fair value even if prudential adjustments are separately applied to reflect particular risks or difficulties in the valuation process.

B. Disclosure issues

4.20 The problem of "how to measure" certain financial instruments highlights the necessity of enhanced disclosure in the accounts on how fair values in practice are determined in cases where they are not readily observable in the market.

4.21 CEIOPS considers that insurance undertakings should have policies to comply with disclosure requirements and for assessing the appropriateness of their reporting and disclosures, including their verification and frequency.

¹¹ "Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience", 7 April 2008, see http://www.fsforum.org/publications/FSF_Report_to_G7_11_April.pdf.

IFRS Framework

4.22 An important part of disclosure requirements is to be found in IFRS, in particular in *IFRS 7: Financial Instruments: Disclosures*.

4.23 This standard covers disclosures on financial instruments, including valuation issues related to them. Specific disclosure requirements on valuation of financial instruments are mainly stated in para. 27:

“An entity shall disclose:

- (a) the methods and, when a valuation technique is used, the assumptions applied in determining fair values of each class of financial assets or financial liabilities. For example, if applicable, an entity discloses information about the assumptions relating to prepayment rates, rates of estimated credit losses, and interest rates or discount rates.*
- (b) whether fair values are determined, in whole or in part, directly by reference to published price quotations in an active market or are estimated using a valuation technique (see paragraphs AG71–AG79 of IAS 39).*
- (c) whether the fair values recognised or disclosed in the financial statements are determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument (i.e. without modification or repackaging) and not based on available observable market data. For fair values that are recognised in the financial statements, 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. For this purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in equity, total equity.*
- (d) if (c) applies, the total amount of the change in fair value estimated using such a valuation technique that was recognized in profit or loss during the period.”*

4.24 In this regard, disclosure of information about valuation techniques used by different undertakings - reflecting the diversity that can exist in terms of valuation practices among institutions - is expected to be particularly helpful for readers of financial statements.

4.25 As IFRS is a principle-based framework, management’s judgment is crucial for the proper application of the standards. In this regard, *IAS 1: Presentation of Financial Statements*, para. 122, requires some disclosure on the judgments made by the management in the process of applying the entity’s accounting policies and that the most significant effect on the amounts recognised in the financial statements have been assessed. These disclosures would affect a variety of significant decisions including, for instance, management’s judgments in determining whether financial assets

are held-to-maturity investments (IAS 1.123). Furthermore, para. 125 stipulates that *"An entity shall disclose information about the assumptions it makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year"*. As acknowledged in subsequent paras. 127 and 129, assumptions and other sources of estimation uncertainty relate to the estimates that require management's most difficult, subjective or complex judgments. In this sense, disclosures should be presented in a manner that helps users to understand the judgments that management makes about the future and about other sources of estimation uncertainty. The nature and extent of the information provided vary according to the nature of the assumption and other circumstances. Examples of the types of disclosures are also exposed in this standard.

4.26 CEIOPS recognises that IFRS offer a wide set of disclosures requirements. Some improvements of how they are applied could however be wished for in light of the market turmoil, notably regarding assumptions and judgements applied for the determination of fair values in the absence of observable data and for determining whether a market is active or not. Results of internal price reviews and tests could also be of some relevance for readers of financial statements.

4.27 In this regard, CEIOPS notes that the Financial Stability Forum (FSF) encouraged the IASB to strengthen its standards to achieve better disclosures about valuations, methodologies and the uncertainty associated with valuations and recommended financial institutions to make robust valuation disclosures enhancing the quality of their disclosures about valuations, valuation methodologies, price verification processes and the uncertainty associated with valuations.

4.28 CEIOPS supports this FSF recommendation and underlines that it is also important that companies themselves strengthen their standards of disclosure quality.

Solvency II framework

4.29 The Solvency II Framework Directive Proposal emphasises the relevance of public disclosure as a strong incentive for undertakings to conduct their business in a sound and efficient manner. Under this framework, Pillar III requires insurance undertakings to publicly disclose a report on their solvency and financial condition on an annual basis. The solvency and financial condition report (SFCR) shall comprise, among other requirements, information on the business and performance of the undertaking; a description of the system of governance and an assessment of its adequacy for the risk profile of the undertaking; a description, separately for each category of risk, of the risk exposure, concentration, mitigation and sensitivity; a description, separately for assets, technical provisions, and other liabilities, of the bases and methods used for their valuation, together with an explanation of any major differences in the bases and methods used for their valuation in financial statements. These requirements will be

subject to further Level 2 implementation guidance based on Advice from CEIOPS. CEIOPS has set some preparatory steps, in this respect, with the submission, in March 2007, of further Advice to the European Commission¹² containing principles of public disclosure by insurance undertakings. The March 2007 Advice informed the Level 1 Commission proposal which came out in July 2007, so some elements of that Advice which are referred to below are already taken account of in the Level 1 text, e.g. description of valuation, and major differences in relation to financial statements figures (Article 50(1)d) of the Framework Directive Proposal.

4.30 In the present financial environment, it is essential to underline that appropriate disclosure could help to strengthen confidence of stakeholders and thus could improve a difficult situation for a specific undertaking, and financial stability in general.

4.31 Many of the disclosure requirements set out in CEIOPS' Advice of March 2007 could be of particular relevance in the current context:

- Breakdown of the investment portfolio and value considered for solvency purposes according to key investment categories (e.g. separate indication of assets related to contracts where risk is borne by policyholders (unit and index linked));
- The extent of the insurance undertaking's reliance on assets of a particular class, market sector or counterparty;
- Description of the methods and, when a valuation technique is used, the assumptions applied in determining the solvency valuation of each class of assets, as considered for solvency purposes;
- Explanation of major differences in relation to figures in financial statements;
- General description of the relevant key internal controls in place (e.g. frequency of revision of the adherence to the defined policies and strategies, how weaknesses and deficiencies are identified by internal control systems, including how and how frequently they are reported to the Board, outsourcing policies and its controls, etc.);
- Information on how the Own Risk and Solvency Assessment (ORSA)¹³ and/or the internal model is integrated into the day-to-day risk management process, namely if and how the results of the analysis performed are an integral part of the process of planning, monitoring and controlling the insurance undertaking's risk profile;
- The analysis performed and an explanation of the results of the sensitivity analysis and any other aspects that may enhance the understanding of the results.

¹² Advice to the European Commission on Supervisory Reporting and Public Disclosure in the Framework of the Solvency II Project (CEIOPS-DOC-03/07), see <http://www.ceiops.eu/media/files/publications/submissionstotheec/CEIOPS-DOC-03-07AdviceonSupervisoryReportingandPublicDisclosure.pdf>

¹³ Formerly referred to as "Internal Risk and Capital Assessment (IRCA)

C. Monoline insurance undertakings

- 4.32 Financial Guarantee Insurers (monoline insurance undertakings or "monolines") are undertakings that provide credit insurance that guarantee payments on bonds and other instruments, in the event that the underlying asset / instrument fails to make capital or interest payments due. The monolines provide their guarantees (wrapped investments) typically either to traded investments (e.g. traditionally municipal bonds) or bespoke protections (sometimes via SPVs) to market counterparties. The result of the monoline insurance is that bonds which otherwise would be unrated or have a lower credit rating, have the rating of the monoline insurer.
- 4.33 Providing a wrapped investment, as opposed to the bespoke transactions, typically means the overall cost of issuance to be lower than it would otherwise be if issued without the involvement of the monoline insurance undertakings, with lower overall interest payable enabling the issuer to pay the premium to the insurer. The continued deterioration in structured credit markets, and in particular in securities related to US subprime mortgages, have caused higher than expected claims to emerge for monoline insurance undertakings, with several of them establishing significant reserves and posting large mark to market losses. Although the scope of this paper does not include valuation rules for technical provisions, it needs to be mentioned that the appropriate level of provisioning by monoline insurance undertakings remains an area of concern for supervisors in deteriorating market conditions and is subject to continuous monitoring.
- 4.34 As a result of the credit crisis, most monoline insurance undertakings have had their credit ratings downgraded, in some cases substantially. If the rating of the monoline insurance undertaking falls, e.g. from AAA to A, then the rating of the bond will normally fall to A (subject to the rating of the issuer not being higher). The bond valuation price will then fall as a result of this downgrade due to the credit spread widening on the bond and undertakings holding the bond will incur a loss of market value (although subject to the underlying instrument not defaulting and there being no change in income stream).
- 4.35 A strong issuer without a rating may seek a rating (and incur expenses thereby) in order to minimise any potential fall in bond price (the cost may be justified by indirect benefit for the undertaking, such as making it easier for the issuer to raise capital in future). Similarly, for bespoke exposures, the quality of the wrap is again diminished on the downgrade or impairment of the wrapping monoline, typically again with deterioration in the value of the wrap to the insured counterparty. As mentioned, recent market conditions have seen a number of downgrades for monoline insurance undertakings, and hence falls in the value of bonds that have been underwritten by these undertakings. This has affected all market participants who have purchased these bonds.

D. Risk management and governance issues

- 4.36 One of the characteristics of the market instability was the wide diversity between credit transfer products created and offered to investors and the underlying complexity of assets backing these products. Many observers underlined that this was not compensated by appropriate transparency on the risks linked to the product, especially on the underlying credit risks. As indicated above, deficiencies were also observed in terms of availability and/or reliability of information necessary for pricing the products.
- 4.37 This increases the need for proper risk management and governance arrangements in undertakings investing in structured credit products. Analysis made around the subject showed that undertakings with more robust risk management and governance systems were more able to withstand these problems.
- 4.38 Under the Solvency II framework, robust governance requirements are a pre-requisite for an efficient solvency system. The insurance undertaking should have a well-defined organisational structure that should support the implementation of effective risk management and internal control systems, in order to ensure that the management and control of operations are undertaken in a sound and prudent manner. These principles will also apply to the investment activities and reporting process of insurance undertakings.
- 4.39 Furthermore, the Framework Directive Proposal includes several references to investments of insurance or reinsurance undertakings.
- 4.40 Articles 130 to 133 of the Framework Directive Proposal contain provisions on the role of investments under Solvency II and the principles that have to be complied with by insurers in the management of their investments. The Explanatory Memorandum of the Proposal indicates the following: *"All investments held by (re)insurance undertakings (i.e. assets covering technical provisions, plus assets covering Solvency Capital Requirement and free assets) must be invested, managed and monitored in accordance with the "prudent person" principle laid down in Article 130. The prudent person principle requires (re)insurance undertakings to invest assets in the best interest of policyholders, adequately match investments and liabilities, and pay due attention to financial risks, such as liquidity and concentration risk."*
- 4.41 Particularly in relation to insurance undertakings, this will introduce a different, more principle-based framework for undertakings' investments, it will become important to devise Level 2 implementing measures and/or Level 3 guidance to ensure a proper application of the principles governing investment management. There is also scope for the European Commission if desired to further specify implementing measures on the identification, measurement and control of risks in relation to certain assets. If necessary, Level 3 guidance on the principles could also be developed.

4.42 Against this background, the following elements could be taken into consideration when considering the difficulties raised with investments in structured credit products:

- Undertakings need have in place clear and robust written investment policies (e.g. risk profile, criteria for selections and investment in complex products, limits...);
- Undertakings need to collect and process all information necessary for the assessment of the merits, the risks and the value of structured credit products in which they plan to invest and, subsequently for the monitoring, valuation and management of their positions. They should be able to demonstrate that effective due processes are in place to this end at all time;
- Undertakings' Own Risk and Solvency Assessment (ORSA) should cover all risks linked to investments, primarily those risks that were not taken into account in the economic valuation of investments.
- Undertakings' internal audit functions and internal control system should cover investment, valuation and reporting activities.

Annex

Extracts from the Solvency II Framework Directive Proposal

SECTION 1 - VALUATION OF ASSETS AND LIABILITIES

Article 74 - Valuation of assets and liabilities

1. Member States shall ensure that, unless otherwise stated, insurance and reinsurance undertakings value assets and liabilities as follows:

(a) assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction;

(b) liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction. When valuing liabilities, no adjustment to take account of the own credit standing of the insurance or reinsurance undertaking shall be made.

2. The Commission shall adopt, implementing measures to set out the methods and assumptions to be used in the valuation of assets and liabilities as laid down in paragraph 1.

SECTION 2 - RULES RELATING TO TECHNICAL PROVISIONS

Article 75 - General provisions

1. Member States shall ensure that insurance and reinsurance undertakings establish technical provisions with respect to all of their insurance and reinsurance obligations towards policyholders and beneficiaries of insurance or reinsurance contracts.

2. The calculation of technical provisions shall be based on their current exit value.

3. The calculation of technical provisions shall make use of and be consistent with information provided by the financial markets and generally available data on insurance and reinsurance technical risks (market consistency).

4. Technical provisions shall be calculated in a prudent, reliable and objective manner.

Article 76 - Calculation of technical provisions

1. The value of technical provisions shall be equal to the sum of a best estimate and a risk margin as set out in paragraphs 2 and 3.

2. The best estimate shall be equal to the probability-weighted average of future cash flows, taking account of the time value of money (expected present value of future cash-flows), using the relevant risk-free interest rate term structure.

The calculation of the best estimate shall be based upon current and credible information and realistic assumptions and be performed using adequate actuarial methods and statistical techniques.

The cash-flow projection used in the calculation of the best estimate shall take account of all the cash in- and out-flows required to settle the insurance and reinsurance obligations over the lifetime thereof.

The best estimate shall be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles. Those amounts shall be calculated separately, in accordance with Article 80.

3. The risk margin shall be such as to ensure that the value of the technical provisions is equivalent to the amount insurance and reinsurance undertakings would be expected to require in order to take over and meet the insurance and reinsurance obligations.

4. Insurance and reinsurance undertakings shall value the best estimate and the risk margin separately.

However, where the future cash flows associated with insurance or reinsurance obligations can be replicated using financial instruments for which a market value is directly observable, the value of technical provisions shall be determined on the basis of the market value of those financial instruments. In this case, separate calculations of the best estimate and the risk margin shall not be required.

5. Where insurance and reinsurance undertakings value the best estimate and the risk margin separately, the risk margin shall be calculated by determining the cost of providing an amount of eligible own funds equal to the Solvency Capital Requirement necessary to support the insurance and reinsurance obligations over the lifetime thereof.

The rate used in the determination of the cost of providing that amount of eligible own funds (Cost-of-Capital rate) shall be the same for all insurance and reinsurance undertakings.

The Cost-of-Capital rate used shall be equal to the additional rate, above the relevant risk-free interest rate, that an insurance or reinsurance undertaking holding an amount of eligible own funds, as set out in Section 3, equal to the Solvency Capital Requirement would incur to hold those funds.

Article 77 - Other elements to be taken into account in the calculation of technical provisions

In addition to Article 76, when calculating technical provisions, insurance and reinsurance undertakings shall take account of the following:

- (1) all expenses that will be incurred in servicing insurance and reinsurance obligations;
- (2) inflation, including expenses and claims inflation;
- (3) all payments to policyholders and beneficiaries, including future discretionary bonuses, which insurance and reinsurance undertakings expect to make, whether or not these payments are contractually guaranteed, unless those payments fall under Article 90.

Article 78 - Valuation of financial guarantees and contractual options included in insurance and reinsurance contracts

When calculating technical provisions, insurance and reinsurance undertakings shall take account of the value of financial guarantees and any contractual options included in insurance and reinsurance policies.

Any assumptions made by insurance and reinsurance undertakings with respect to the likelihood that policyholders will exercise contractual options, including lapses and surrenders, shall be realistic and based on current and credible information. The assumptions shall take account, either explicitly or implicitly, of the impact that future changes in financial and non-financial conditions may have on the exercise of those options.

(...)