

To: Solvency II SG
From: Economics & Finance department
Date: 16 July 2014
Reference: ECO-SLV-14-275

Subject: Input requested - Volatility Adjustment meeting with Eiopa

Background

As the Secretariat informed members during the Solvency II SG on 2 July, EIOPA agreed to have an informal meeting with a few industry representatives regarding the Volatility Adjustment, to discuss EIOPA's and the industry's methodologies to derive it.

The meeting will take place on Thursday 31 July. The Credit Risk Adjustment is also likely to be part of the discussions.

Therefore, the Secretariat is requesting members' input in order to agree on any issues to be discussed and any outstanding questions to be raised at the meeting on these topics.

Members' feedback has to be sent to prudential@insuranceeurope.eu by **Wednesday 23 July COB**.

Please find below in order to help you to provide input, the questions which seem open from the Secretariat's point of view, together with an Annex compiling the legislative specifications related to both the Volatility Adjustment and the Credit Risk Adjustment.

Draft open questions for discussion

- How has the Volatility Adjustment of 22 bps for year-end (YE) 2013 been derived for the Stress test 2014?
 - How the calibration of the weights is done:
 - ☐ For government bonds, between the countries
 - ☐ For corporate bonds, between the ratings
 - How the calibration of the government and corporate spreads has been done
 - ☐ We assume that spreads are calculated by deducting the RFR from the yields on the assets:
 - ☐ $VA = 65\% * (w_{gov} (Yield_{gov} - (Swap - CRA) - FS_{gov})$
 - ☐ $+ w_{corp} (Yield_{corp} - (Swap - CRA) - FS_{corp}))$
 - ☐ Then we need more details for each parameter of the above formula (frequency, index, etc)
 - How have the national adjustments been derived?
 - ☐
 - How often will EIOPA update the weights referred to above? Quarterly, Annually?
- Any remaining issues or specifications regarding the CRA?
 - What is the **maturity** of the swap curves for which the 3-month tenor is looked at – e.g is it 20 years?

Reference portfolios by currency and country

Solvency II Directive	Draft Delegated Acts
<i>Article 77d</i> <i>Volatility adjustment to the relevant risk-free interest rate term structure</i> (Reference portfolio by currency) 2. For each relevant currency, the volatility adjustment to the relevant risk-free interest rate term structure shall be based on the spread between the interest rate that could be earned from assets included in a reference portfolio for that currency and the rates of the relevant basic risk free interest rate term structure for that currency. The reference portfolio for a currency shall be representative for the assets which are denominated in that currency and which insurance and reinsurance undertakings are invested in to cover the best estimate for insurance and reinsurance obligations denominated in that currency.	<i>Article 41 IR6</i> <i>(Art. 77d(2) of Directive 2009/138/EC)</i> <i>Reference portfolios</i> 2. For each currency and each country, the reference portfolio of assets shall meet the following requirements: (a) <u>for each currency</u>, the assets are representative of the investments made by insurance and reinsurance undertakings in that currency to cover the best estimate for insurance and reinsurance obligations in that currency; <u>for each country</u>, the assets are representative of the investments made by insurance and reinsurance undertakings in that country to cover the best estimate for insurance and reinsurance obligations sold in the insurance market of that country and denominated in the currency of that country. [Investments of insurance and reinsurance undertakings in collective investment undertakings and other investments packaged as funds shall be treated like investments in the underlying assets] (b) where available the portfolio is based on relevant indices; (c) the indices referred to in point (b) are readily available to the public and published criteria exist for when and how the constituents of those indices will be changed; (d) the portfolio of assets includes the following assets: • bonds, securitisations and loans, including mortgage loans • equity • property

Formula to calculate the spread underlying the volatility adjustment

Solvency II Directive	Draft Delegated Acts
<i>Article 77d</i> <i>Volatility adjustment to the relevant risk-free interest rate term structure</i> 3. The amount of the volatility adjustment to risk-free interest rates shall correspond to 65 % of the risk-corrected currency spread. The risk-corrected currency spread shall be calculated as the difference between the spread referred to in paragraph 2 and the portion of that spread that is attributable to a realistic assessment of expected losses, or unexpected credit or other risk, of the assets. The volatility adjustment shall apply only to the relevant risk-free interest rates of the term structure that are not derived by means of extrapolation in accordance with Article 77a. The extrapolation of the relevant risk-free interest rate term structure shall be based on those adjusted risk-free interest rates. 4. For each relevant country, the volatility adjustment to the risk-free interest rates referred to in paragraph 3 for the currency of that country shall, before application of the 65 % factor, be increased by the difference between the risk-corrected country spread and twice the risk-corrected currency spread, whenever that difference is positive and the risk-corrected country spread is higher than 100 basis points. The increased volatility adjustment shall be applied to the calculation of the best estimate for insurance and reinsurance obligations of products sold in the insurance market of that country. The risk-corrected country spread is calculated in the same way as the risk-corrected currency spread for the currency of that country, but based on a reference portfolio that is representative for the assets which insurance and reinsurance undertakings are invested in to cover the best estimate for insurance and reinsurance obligations of products sold in the insurance market of that country and denominated in the currency of that country.	<i>Article 41bis</i> <i>(Art. 77d(2) of Directive 2009/138/EC)</i> <i>Formula to calculate the spread underlying the volatility adjustment</i> For each currency and each country the spread shall be equal to the following: $S = w_{gov} \cdot \max(S_{gov}, 0) + w_{corp} \cdot \max(S_{corp}, 0)$ where (a) w_{gov} denotes the ratio of the value of government bonds included in the reference portfolio of assets for that currency or country and the value of all the assets included in that reference portfolio; (b) S_{gov} denotes the average currency spread on government bonds included in the reference portfolio of assets for that currency or country, determined in accordance with Article 41ter; (c) w_{corp} denotes the ratio of the value of bonds other than government bonds, loans and securitisations included in the reference portfolio of assets for that currency or country and the value of all the assets included in that reference portfolio; (d) S_{corp} denotes the average currency spread on bonds other than government bonds, loans and securitisations included in the reference portfolio of assets for that currency or country, determined in accordance with Article 41ter. For the purpose of this Article, 'government bonds' means exposures to central governments and central banks. <i>Article 41ter</i> <i>(Art. 77d(3) of Directive 2009/138/EC)</i> <i>Risk-corrected spread</i> The portion of the spread that is attributable to a realistic assessment of expected losses, unexpected credit risk or any other risk referred to in paragraph 3 and 4 of Article 77d of Directive 2009/138/EC shall be calculated in the same manner as the fundamental spread referred to in Article 77c paragraph (2) of Directive 2009/138/EC and Article 42quater.

Adjustment to swap rates for credit risk (CRA)

Solvency II Directive	Draft Delegated Acts
<i>Article 77a</i> <i>Extrapolation of the relevant risk-free interest rate term structure</i> The determination of the relevant risk-free interest rate term structure referred to in Article 77(2) shall make use of and be consistent with information derived from relevant financial instruments. That determination shall take into account relevant financial instruments of those maturities where the markets for those financial instruments as well as for bonds are deep, liquid and transparent. For maturities where the markets for the relevant financial instruments or for bonds are no longer deep, liquid and transparent, the relevant risk-free interest rate term structure shall be extrapolated. The extrapolated part of the relevant risk-free interest rate term structure shall be based on forward rates converging smoothly from one or a set of forward rates in relation to the longest maturities for which the relevant financial instrument and the bonds can be observed in a deep, liquid and transparent market to an ultimate forward rate.	<i>Article 38bis</i> <i>(Art. 77(2) of Directive 2009/138/EC)</i> <i>Adjustment to swap rates for credit risk</i> The adjustment shall be determined on the basis of the difference between rates capturing the credit risk reflected in the <u>floating rate of interest rate swaps and overnight indexed swap rates of the same maturity, where both rates are available from deep, liquid and transparent financial markets</u>. The calculation of the adjustment shall be based on <u>50 percent of the average of that difference over a time period of one year</u>. <u>The adjustment shall not be lower than 10 basis points and not be higher than 35 basis points.</u> <i>Recital 20</i> The adjustment for credit risk to the basic risk-free interest rates should be derived from market rates that capture the credit risk reflected in the floating rate of interest rate swaps. For this purpose, in order to align the determination of the adjustment with standard market practice, under market conditions similar to those at the date of adoption of [Omnibus II], in particular for the euro, the market rates should correspond to interbank offered rates for a 3 month tenor.