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Final Report on Public Consultation No. 14/036 on Guidelines on the treatment of market and counterparty risk exposures in the standard formula

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1. Executive summary

Introduction

According to Article 16 of Regulation (EU) No 1094/2010 (EIOPA Regulation) EIOPA may issue guidelines addressed to National Competent Authorities (NCAs) or financial institutions.

According to Article 16 of the EIOPA Regulation, EIOPA shall, where appropriate, conduct open public consultations and analyse the potential costs and benefits. In addition, EIOPA shall request the opinion of the Insurance and Reinsurance Stakeholder Group (IRSG) referred to in Article 37 of the EIOPA Regulation.

According to Articles 104 (1), 105 (5) and (6) of Directive 2009/138/EC[1] (Solvency II Directive) and subsections 5 and 6 of chapter 5 of the Implementing Measures[2] undertakings have to cover market and counterparty risk when calculating their Solvency Capital Requirement with the standard formula. EIOPA decided to draft Guidelines to facilitate convergence of practices across Member States and support undertakings in applying the market and counterparty default risk modules of the standard formula.

As a result of the above, on 2 June 2014 EIOPA launched a Public Consultation on the draft Guidelines on the treatment of market and counterparty risk exposures in the standard formula. The Consultation Paper is also published on EIOPA's website[3].

These Guidelines were issued to undertakings and National Competent Authorities to:

- Establish consistent, efficient and effective supervisory practices;
- Ensure the common, uniform and consistent application of Union law on the calculation of the capital requirement for market and counterparty default risk.

Content

This Final Report includes the feedback statement to the consultation paper (EIOPA-CP-14/036) and the Guidelines. The Impact Assessment and cost and benefit analysis, and the Resolution of comments are published on EIOPA's website[4].

[1] OJ L 335, 17.12.2009, p. 1–155

[2] As published by the European Commission on 10 October 2014: http://ec.europa.eu/internal_market/insurance/docs/solvency/solvency2/delegated/141010-delegated-act-solvency-2_en.pdf

[3] [4] https://eiopa.europa.eu/consultations/consultation-papers/2014-closed-consultations/june-2014/public-consultation-on-the-set-1-of-the-solvency-ii-guidelines/index.html

Next steps

In accordance with Article 16 of the EIOPA Regulation, within 2 months of the issuance of these guidelines, each competent authority shall confirm if it complies or intends to comply with these guidelines. In the event that a competent authority does not comply or does not intend to comply, it shall inform EIOPA, stating the reasons for non-compliance.

EIOPA will publish the fact that a competent authority does not comply or does not intend to comply with these guidelines. The reasons for non-compliance may also be decided on a case-by-case basis to be published by EIOPA. The competent authority will receive advanced notice of such publication.

EIOPA will, in its annual report, inform the European Parliament, the Council and the European Commission of the guidelines issued, stating which competent authority has not complied with them, and outlining how EIOPA intends to ensure that concerned competent authorities follow its guidelines in the future.

2. Feedback statement

Introduction

EIOPA would like to thank the Insurance and Reinsurance Stakeholder Group (IRSG) and all the participants to the Public Consultation for their comments on the draft guidelines. The responses received have provided important guidance to EIOPA in preparing a final version of these guidelines. All of the comments made were given careful consideration by EIOPA. A summary of the main comments received and EIOPA's response to them can be found in the sections below. The full list of all the comments provided and EIOPA's responses to them is published on EIOPA's website.

General comments

1. Employee benefits

a) A number of comments disagreeing with this Guideline were received. The main arguments were:

   1. Holding capital against employee benefits would put insurers at a disadvantage compared to other industry sectors.
   2. Employee benefits are outside of the scope of Directive 2009/138/EC.
   3. This guideline contradicts Article 336 of the Implementing Measures, which requires that the capital requirements for institutions of occupational retirement provision within the meaning of Directive 2003/41/EC calculated according to the relevant sectorial rules are added to the SCR calculated based on the consolidated data referred to in Article 335 (1)(a), (b) and (c) of the Implementing Measures.

b) For (a) and (b), EIOPA considers that the requirements to hold capital to cover the market and counterparty risk resulting from employee benefits liabilities provided that the undertaking is fully or partially liable for losses are based on Article 105(5) of Directive 2009/138/EC and risks cannot be excluded from the Solvency Capital Requirements based on potential competitive disadvantages in labour markets.

   At the same time the requirement to hold capital to cover the life underwriting risk is according to Article 105 (3) of Directive 2009/138/EC limited to life insurance obligations and can therefore not be extended to employee benefits.

   Regarding point (c), EIOPA has a different reading of the Guideline and Article 336 of the Implementing Measures. The Guideline does not introduce an additional capital requirement for IORPs on the solo level. On the group level according to Article 336 of the Implementing Measures, the proportional share of the sectoral capital requirement for the IORP has to be added to a Solvency Capital Requirement calculated on the basis of consolidated data. The latter figure has to reflect the risk of the consolidated part of the group. If the liabilities for employee benefits have to be recognised for the consolidated part of the group or the insurer is liable for any losses then ignoring the associated market and counterparty risks could result in underestimating the Solvency Capital Requirement for the consolidated part of the group

EIOPA is therefore of the opinion that the Guideline is in line with the Solvency II Directive and the Implementing Measures.
EIOPA amended the Guideline to make it clearer that market and counterparty stresses have to be applied in all cases where liabilities arising from employee benefits are recognised in the balance sheet.

2. Simplifications

a) It was suggested to allow simplifications when calculating the duration of bonds and loans with call options.

b) EIOPA understand the wish for simplifications, but Guidelines cannot introduce simplifications in addition to those defined in the Implementing Measures.

3. Interest rate shocks

a) It was proposed that the interest rate stresses specified in Articles 166 and 167 of the Implementing Measures should only be applied to the non-extrapolated part of the curve. The stresses in the extrapolated part of the curve would then be simply a result of the stresses to the non-extrapolated part.

   Stakeholders were not clear what the sentence "this may involve a mark to model valuation for the assets under the stresses" means and suggested a deletion. Stakeholders also presented two possibilities how interest rate shocks could be applied to bonds valued mark-to-market.

b) For the first point: EIOPA considers that the mentioned Articles leave no room for this interpretation.

   For the second point: EIOPA clarified why a mark-to-model valuation should be applied to bonds which are marked-to-market and how to apply the interest rate shock on such bonds.

General nature of the participants to the Public Consultation

EIOPA received comments from the Insurance and Reinsurance Stakeholder Group (IRSG) and eight responses from other stakeholders to the public consultation. All non-confidential comments received have been published on EIOPA's website.

Respondents can be classified into three main categories: European trade, insurance, or actuarial associations; national insurance or actuarial associations; and (re)insurance groups or undertakings. Below is a summary of the types of respondents.

IRSG opinion

The IRSG opinion on the draft set 1 of the Solvency II Guidelines on Pillar 1 and Internal Models, as well as the particular comments on the Guidelines at hand, can be consulted on EIOPA's website[5].

Comments on the Impact Assessment

A separate Consultation Paper was prepared covering the Impact Assessment for the Set 1 of EIOPA Solvency II Guidelines. Where the need for reviewing the Impact Assessment has arisen following comments on the guidelines, the Impact Assessment Report has been revised accordingly.

The revised Impact Assessment on the Set 1 of EIOPA Solvency II Guidelines can be consulted on EIOPA's website.

[5] https://eiopa.europa.eu/about-eiopa/organisation/stakeholder-groups/sgs-opinion-feedback/index.html

Annex: Guidelines

1. Guidelines on the treatment of market and counterparty risk exposures in the standard formula

Introduction

1.1. According to Article 16 of Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (hereinafter "EIOPA Regulation")[6], EIOPA is issuing Guidelines on the treatment of market and counterparty risk exposure in the standard formula

1.2. These Guidelines relate to Article 104 and 105 of Directive 2009/138/EU of the European Parliament and of the Council of 25 November 2009 on the taking up and pursuit of the business of Insurance and Reinsurance (hereinafter "Solvency II")[7] and to 164 to Article 202 of the Implementing Measures.

1.3. These Guidelines are addressed to supervisory authorities under Solvency II.

1.4. These Guidelines aim at facilitating convergence of practices across Member States and supporting undertakings in applying the market and counterparty default risk modules of the standard formula.

1.5. For the purpose of these Guidelines, the following definition has been developed:

- 'short equity position' means a short position relating to equity resulting from a short sale within the meaning of paragraph 1(b) of Article 2 of Regulation (EU) 236/2012.

1.6. If not defined in these Guidelines the terms have the meaning defined in the legal acts referred to in the introduction.

1.7. These Guidelines shall apply from 1 April 2015.

Guideline 1 – Employee benefits

1.8. Where liabilities for employee benefits are recognised in accordance with Chapter II of the Implementing Measures, undertakings should take them into account in the calculation of the capital requirements for counterparty default risk and market risk modules. For this purpose, undertakings should take into account the nature of the benefits and where relevant, the nature of all contractual arrangements with an institution for occupational retirement provision as defined by Directive 2003/41/EC or another insurance or reinsurance undertaking for the provision of these benefits.

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[6] OJ L 331, 15.12.2010, p. 48–83
[7] OJ L 335, 17.12.2009, p. 1-155

1.9. If the management of the assets representing the liabilities for employee benefits has been outsourced, undertakings acting as a sponsor should take them into account in the calculation of the capital requirement for market risk and counterparty default risk modules provided, they are liable for any loss in value of these assets.

Guideline 2 - Influence of call options on duration

1.10. When determining the duration of bonds and loans with call options undertakings should take into account that they may not be called by the borrower in the event that its creditworthiness deteriorates, credit spreads widen or interest rates increase.

Guideline 3 – Average duration for the duration-based equity sub-module

1.11. Undertakings should interpret the average duration referred to in Article 304 (1) (b) (iii) of Solvency II as the duration of the aggregated cash-flows of the liabilities.

Guideline 4 – Interest rate risk sub-module

1.12. Undertakings should include all interest rate sensitive assets and liabilities in the calculation of the capital requirement for the interest rate risk sub-module.

1.13. The technical provision should be recalculated under the scenarios using the risk free interest rate term structure after the shock, which is determined by stressing the basic risk free interest rate term structure and adding back matching adjustment, volatility adjustment or transitional measure on the risk free rate under Article 308 (c) of the Solvency II Directive, if applicable.

1.14. The assets value should be recalculated under the scenarios by stressing only the basic risk free interest rate term structure and any spreads over the basic risk free interest rate term structure should remain unchanged. This may involve using a mark to model valuation for determining the value of the assets under the stresses.

1.15. Insurance and reinsurance undertakings should ensure that the values of assets before the stresses obtained by using a mark-to-model valuation are consistent with the quoted market prices of relevant assets in active markets.

Guideline 5 - Investments with equity and debt instrument characteristics

1.16. Where assets exhibit debt and equity instrument characteristics, undertakings should take into account both of these features when determining which standard formula risk sub-modules should apply.

1.17. When determining which standard formula risk sub-modules apply undertakings should consider the economic substance of the asset.

1.18. Where the asset can be considered as the composite of discrete components, undertakings should where appropriate apply the relevant stresses to each of these components separately.

1.19. Where it is not possible to consider the asset as the composite of separate components undertakings should base the determination of which of the standard formula risk sub-modules apply on whether the debt or equity characteristics predominate in an economic sense.

Guideline 6 - Short equity positions

1.20. Where undertakings hold short equity positions, they should only be used to offset long equity positions in the calculation of the capital requirement for equity risk if the requirements set out in Articles 208 to 215 of the Implementing Measures are met.

1.21. Undertakings should ignore any other short equity position (residual short equity positions) in the calculation of the capital requirement for equity risk.

1.22. The residual short equity positions should not be considered to increase in value from applying the stresses to equities.

Guideline 7 – Market risk concentration sub-module

1.23. Without prejudice to Article 187 (3) second part of the Implementing Measures, undertakings should not assign a risk factor of 0 % to investments in entities which are owned by entities included in the list set out in Article 187 (3) of the Implementing Measures.

Guideline 8 – Securities lending transactions and similar agreements

1.24. When determining the capital requirements for securities lending or borrowing transactions and repurchase or reverse repurchase agreements including liquidity swaps, undertakings should follow the recognition of the exchanged items in the Solvency II balance sheet. They should also take into account contractual terms and risks stemming from the transaction or agreement.

1.25. If the lent asset remains on the balance sheet and the received asset is not recognised, undertakings should:

(a) apply the relevant market risk sub-modules to the lent asset;

(b) include the lent asset in the calculation of the capital requirement for counterparty default risk on type 1 exposures, taking into account the risk-mitigation that the received asset provides if it is recognised as collateral in accordance with the requirements set out in Article 214 of the Implementing Measures.

1.26. If the received asset is recognised and the lent asset does not remain on the balance sheet, undertakings should:

(a) apply the relevant market risk sub-modules to the received asset;

(b) take into account the lent asset in the calculation of the capital requirement for counterparty default risk on type 1 exposures based on the balance sheet value of the lent asset at the time of the exchange, if the contractual terms and the legal provisions in the case of an insolvency of the borrower give rise to a risk that the lent asset is not returned although the received asset has been handed back.

1.27. If the lent asset and the received asset are recognised in the Solvency II balance sheet, undertakings should:

(a) apply the relevant market risk sub-modules to the lent asset and the borrowed asset;

(b) include the lent asset in the calculation of the capital requirement for counterparty default risk on type 1 exposures, taking into account the risk-mitigation that the received asset provides if it is recognised as collateral in accordance with the requirements set out in Article 214 of the Implementing Measures;

(c) consider liabilities on its balance sheet which result from the lending arrangement in the calculation of the capital requirement for the interest rate risk sub-module.

Guideline 9 – Commitments which may create payment obligations

1.28. As provided for in Article 189 (2) (e) of the Implementing Measures the capital requirement for type 1 exposures in the counterparty default risk module should be applied to legally binding commitments which an undertaking has provided or arranged.

1.29. When no nominal value is explicitly mentioned in the commitment arrangement, undertakings should determine the corresponding loss given default, as referred to in Article 192 (5) of the Implementing Measures on the basis of an estimated nominal amount.

1.30. The estimated nominal value is the maximum amount that is expected to be paid in case of a credit event of the counterparty.

Compliance and Reporting Rules

1.31. This document contains Guidelines issued under Article 16 of the EIOPA Regulation. In accordance with Article 16 (3) of the EIOPA Regulation, national competent authorities shall make every effort to comply with guidelines and recommendations.

1.32. Competent authorities that comply or intend to comply with these Guidelines should incorporate them into their regulatory or supervisory framework in an appropriate manner.

1.33. Competent authorities shall confirm to EIOPA whether they comply or intend to comply with these Guidelines, with reasons for non-compliance, within two months after the issuance of the translated versions.

1.34. In the absence of a response by this deadline, competent authorities will be considered as non-compliant to the reporting and reported as such.

Final Provision on Reviews

1.35. The present Guidelines shall be subject to a review by EIOPA.

2. Explanatory text

Guideline 1 – Employee benefits

Where liabilities for employee benefits are recognised in accordance with Chapter II of the Implementing Measures, undertakings should take them into account in the calculation of the capital requirements for counterparty default risk and market risk modules. For this purpose, undertakings should take into account the nature of the benefits and where relevant, the nature of all contractual arrangements with an institution for occupational retirement provision as defined by Directive 2003/41/EC or another insurance or reinsurance undertaking for the provision of these benefits.

If the management of the assets representing the liabilities for employee benefits has been outsourced, undertakings acting as a sponsor should take them into account in the calculation of the capital requirement for market risk and counterparty default risk modules provided, they are liable for any loss in value of these assets.

1.1. The following examples illustrate what the Guideline means for particular cases:

Case 1: No outsourcing, all the employee benefits are on the balance sheet of the insurance undertaking.

→ The market risk and counterparty default risk modules are applied in the same way as for insurance liabilities.

Case 2: Defined Benefit pension promise, completely outsourced in a sponsor underwritten IORP, with unlimited sponsor support.

→ The assets and liabilities of the IORP have to be taken into account in the calculation of the Solvency Capital Requirement and the shocks have to be applied as if the insurance undertaking were directly holding the assets of the IORP.

Case 3: Defined Benefit pension promise, completely outsourced in an own fund-IORP or another insurer, with no sponsor support (the external IORP or insurer bears the market risks)

→ No need to include the employee benefits in the calculation of the capital requirement for market risk and counterparty default risk.

Case 4: Pure Defined Contribution pension promise (with no guarantees)

→ No need to include the employee benefits in the calculation of the capital requirement for market risk and counterparty default risk.

Guideline 2 - Influence of call options on duration

When determining the duration of bonds and loans with call options undertakings should take into account that they may not be called by the borrower in the event that its creditworthiness deteriorates, credit spreads widen or interest rates increase.

1.2. In the case of subordinated bonds with call options, the options may not be exercised in a wider range of circumstances. This uncertainty needs to be reflected when calculating the duration of such assets.

Guideline 5 - Investments with equity and debt instrument characteristics

Where assets exhibit debt and equity instrument characteristics, undertakings should take into account both of these features when determining which standard formula risk sub-modules should apply.

When determining which standard formula risk sub-modules apply undertakings should consider the economic substance of the asset.

Where the asset can be considered as the composite of discrete components, undertakings should where appropriate apply the relevant stresses to each of these components separately.

Where it is not possible to consider the asset as the composite of separate components undertakings should base the determination of which of the standard formula risk sub-modules apply on whether the debt or equity characteristics predominate in an economic sense.

1.3. Consider as an example bonds with a fixed term to maturity where the holder can convert them into a specified number of shares of the common stock in the issuing company at particular intervals or during the term of the bond. One way of applying the standard formula is to consider them as bond with a call option on equity. The bond component has to be subject to the spread risk, interest rate risk and any other relevant risk sub-modules as appropriate. The call option has to be subject to the equity risk, interest rate risk and any other relevant risk sub-modules as appropriate.

1.4. With this approach the spread risk charge is not applied to the full market value of the convertible bond but only to the part which can be considered as the fixed income bond.

Guideline 7 – Market risk concentration sub-module

Without prejudice to Article 187 (3) second part of the Implementing Measures, undertakings should not assign a risk factor of 0 % to investments in entities which are owned by entities included in the list set out in Article 187(3) of the Implementing Measures.

1.5. As an example consider two recapitalised banks A and B. A has a credit quality equivalent to step 1 and B has a credit quality equivalent to step 2. Both banks are owned by a holding entity C, which in turn is owned by the national government of a Member State. The banks A and B are not fully, unconditionally and irrevocably guaranteed by the national government of a Member State.

1.6. An insurer holds bonds of 50 in bank A and of 100 in bank B. These investments do not attract a risk factor of 0 % for the calculation in the market risk concentration sub-module. Instead the weighted average credit quality step of the exposure to A and B has to be used. In this case the weighted average is 1*50 / 150 + 2 * 100 / 150 = 5 / 3. The rounded-up whole number is 2, so the insurer has to use a credit quality step of 2 for this single name exposure.

1.7. Debt instruments issued by the national government attract a risk factor of 0 % in accordance with Article 187 (3) of the Implementing Measures.

1.8. There might be situations where undertakings have exposures to a number of companies owned by entities listed in Article 187 (3) of the Implementing Measures. Consider an undertaking that has exposures of 10 to A, B and C each. A is listed in Article 187 (3) of the Implementing Measures. B and C are owned by A and the 0% market risk concentration charge does not apply because they are not fully, unconditionally and irrevocably guaranteed by the national government of a Member State. As B and C are owned by the same entity they are considered to belong to the same single name exposure. In accordance with Article 184 (3) of the Implementing Measures, the exposure to A is excluded from the exposure at default for this single name exposure which has a value of 20.

1.9. Exposures to counterparties that are part of the same corporate group as the insurance undertaking, which do not meet the requirements of Article 184(2) of the Implementing Measures for exclusion from market risk concentration, have to be assigned to the same single name exposure. For example, consider an undertaking which has exposures to the counterparties A, B, C and D of 10 each. The counterparties A, B, C and D are part of the same corporate group as the undertaking itself. The exposure to A is excluded from the calculation base of the market concentration risk because it is fully, unconditionally and irrevocably guaranteed by an entity listed in Article 187 (3) of the Implementing Measures. B is excluded from the calculation base of the market concentration risk because it meets the requirements of Article 184 (2) of the Implementing Measures. C and D are included in the calculation base (e.g. because they are not established in the Union and therefore do not comply with point (iv) of Article 184 (2) of the Implementing Measures). C and D are considered as a single name exposure with a value of 20.

Guideline 9 – Commitments which may create payment obligations

As provided for in Article 189 (2) (e) of the Implementing Measures the capital requirement for type 1 exposures in the counterparty default risk module should be applied to legally binding commitments which an undertaking has provided or arranged.

When no nominal value is explicitly mentioned in the commitment arrangement, undertakings should determine the corresponding loss given default, as referred to in Article 192 (5) of the Implementing Measures on the basis of an estimated nominal amount.

The estimated nominal value is the maximum amount that is expected to be paid in case of a credit event of the counterparty.

1.10. The scope of Article 189 (2) (e) of the Implementing Measures covers a commitment to provide support to another undertaking – related or otherwise – and is also applicable regardless of whether the item constitutes an approved Ancillary Own Fund item for a recipient undertaking within the scope of Solvency II.

Appendix – Duration of cash flows

A future cash flow is determined by payments *c*(*i*) at times *t*(*i*), *i* = 1, 2, 3 .... When discounting the cash flow one uses in the case of continuously paid interest a curve for the interest rate intensity $\partial(t)$ or for the rate of interest *r*(*t*) as a function of time *t*. The time *t* is measured in years. The relation between these is given by

$$e^{-\delta(t)} = \frac{1}{1+r(t)}$$

The total discounted value of the cash flow is

$$V = \sum_i c(i) e^{-t(i)\delta(t(i))} = \sum_i \frac{c(i)}{(1+r(t(i))^{t(i)}}$$

The duration *D* (Macaulay duration) of the discounted cash flow is the weighted time average of the payments, defined by

$$D = \frac{\sum_i c(i)t(i)e^{-t(i)\delta(t(i))}}{V}$$

Background

The duration *D* can be interpreted as the relative sensitivity of the value *V* to a parallel shift of the interest rate curve $\partial(t)$. This can be shown as follows. Let *V*(*h*) be the value of the discounted cash flow at interest rate $\partial(t)$+h, i.e.

$$V(h) = \sum_i c(i) e^{-t(i)[\delta(t(i))+h]}$$

The derivative of *V*(*h*) with respect to *h* is

$$\frac{dV(h)}{dh} = -\sum_i c(i)t(i)e^{-t(i)[\delta(t(i))+h]}$$

and therefore

$$D = -\left[\frac{dV(h)}{dh}\right]_{h=0} / V$$

If the payments occur at times $t(i) = i/k$, $i = 1, 2, 3 \ldots$, where $k = 1$ for annual payments, $k = 12$ for monthly payments etc., and if the annual rate of interest is constant equal to r, the discounted value of the cash flow is

$$V = \sum_i \frac{c(i)}{(1 + r/k)^i}$$

The duration is

$$D = \frac{\sum_i \frac{(i/k)c(i)}{(1 + r/k)^i}}{V}$$

Background

The sensitivity of the value $V = V(r)$ to a change of the interest rate r can be measured by the derivative of $V(r)$ with respect to r

$$\frac{dV(r)}{dr} = -\sum_i \frac{(i/k)c(i)}{(1 + r/k)^{1+i}}$$

The relative sensitivity of the value is therefore

$$\frac{dV(r)}{dr} / V(r) = -\frac{D}{1 + r/k}$$

The quantity $D/(1 + r/k)$ is called the modified duration. The difference between these two concepts is often immaterial.

If the interest curve is not constant, the modified duration D_{mod} of a cash flow with maturity T is defined as

$$D_{\text{mod}} = \frac{D}{1 + r(T)/k}$$

For a cash flow which is stochastic, future payments are replaced by their expected values. As an example, for an annuity, where payment of an amount $B(i)$ at time $t(i)$ will occur with probability $p(i)$, we have

$c(i) = p(i) \cdot B(i)$.

Duration can also be determined for the undiscounted cash flow, i.e. with $r(t) = 0$.