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**CONSULTATION PAPER**

**CESR's Guidelines on Risk  
Measurement and the  
Calculation of Global Exposure  
for certain types of structured  
UCITS**

**Deadline for contributions:** CESR invites responses to this consultation paper by **31 December 2010**. All contributions should be submitted online via CESR's website under the heading 'Consultations' at [www.cesr.eu](http://www.cesr.eu). All contributions received will be published following the close of the consultation, unless the respondent requests their submission to be confidential.



## Executive Summary

This paper sets out CESR's proposed guidelines on Risk Measurement and the Calculation of Global Exposure for certain types of structured UCITS. These guidelines supplement the guidelines on Risk Measurement and the Calculation of the Global Exposure and Counterparty Risk (Ref. CESR/10-788) published in July this year. Once adopted, they will be incorporated into the July guidelines.

This consultation paper proposes a specific approach to the application of the guidelines on the calculation of the global exposure for certain types of structured UCITS.

Structured UCITS offer investors a predefined payoff depending on different scenarios based on the value of the underlying assets. The specific approach as proposed by CESR consists of the calculation, for each scenario to which investors can be exposed at any one time, of the global exposure using the commitment approach. Under this approach, each scenario must comply at all times with the 100% global exposure limit using the existing CESR Guidelines.

CESR considers that the scope of this alternative approach must be clearly defined. Therefore, a list of criteria with which structured UCITS should comply in order to be able to benefit from this specific approach is set out in this consultation.

CESR also proposes that structured UCITS that comply with certain of the criteria set out in paragraph 2 of Box 29 and that have been authorised before 1 July 2011 are not required to comply with Boxes 1 to 25 of these Guidelines, provided they comply with any rules set by their home State competent authority for the calculation of global exposure.



## Introduction

In July 2010, CESR published guidelines for Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Ref. CESR/10-788). These guidelines accompanied the level 2 implementing measures in the context of risk measurement and the calculation of global exposure and counterparty risk for UCITS published by the European Commission in July 2010 (Commission Directive 2010/43/EU).

The key purpose of the guidelines is to provide stakeholders with detailed methodologies in order to foster a level playing field among Member States in the area of risk measurement and the calculation of global exposure and counterparty risk for UCITS.

In the consultation paper (Ref. CESR/10-118) setting out CESR's proposed guidelines, CESR sought stakeholders' views on the need for a specific regime for the calculation of the global exposure for certain types of structured UCITS. The feedback from the public consultation resulted in a general request to develop such a methodology. Therefore, in order to be able to take into account fully the feedback from the public consultation on this issue, CESR committed itself to carry out further work to assess whether it would be appropriate for certain types of structured UCITS to use other methodologies to calculate the global exposure.

In order to carry out this work, CESR hosted a workshop with industry representatives on 22 September 2010. This workshop was the opportunity for industry representatives to explain in more detail to CESR why an alternative approach for the calculation of the global exposure was, in their view, necessary for certain types of structured UCITS.

Taking into account the discussion with industry representatives and further reflection on this issue, CESR came to the conclusion that a specific regime per se for the calculation of the global exposure for these UCITS was not necessary. Rather, CESR believes that it would be more appropriate to have an alternative approach to the application of the existing guidelines to certain types of structured UCITS rather than a specific methodology for the calculation of the global exposure.

## Guidelines

### Calculation of Global Exposure using the Commitment Approach

#### Box 29

1. All structured UCITS must comply with the Guidelines for the calculation of global exposure.
2. Structured UCITS which have the following characteristics:
  - a) the UCITS is passively managed and structured to achieve at maturity the pre-defined payoff and holds at all times the assets needed to ensure that this pre-defined payoff will be met;
  - b) the UCITS is formula based and the pre-defined payoff can be divided into a limited number of separate scenarios which are dependent on the value of the underlying assets and which offer investors different payoffs;
  - c) the investor can only be exposed to one scenario at any time during the life of the UCITS;
  - d) the use of the commitment approach to calculate global exposure for the individual scenarios is appropriate taking into account the requirements of Box 1 of the Guidelines;
  - e) the UCITS has a final maturity not exceeding 9 years;
  - f) the UCITS is closed to new subscriptions after the initial marketing period;
  - g) the impact of the performance of a single underlying asset on the payoff when the UCITS switches from one scenario to another complies with the diversification requirements of the UCITS Directive; and
  - h) the maximum loss the UCITS can suffer when the portfolio switches from one scenario to another must be limited.

may calculate global exposure using the commitment approach in the following way:

- a) The formula-based investment strategy for each predefined payoff is broken down into individual payoff scenarios.
  - b) The financial derivative instruments implied in each scenario must be assessed to establish whether the derivative may be excluded from the calculation of global exposure under the provisions of Box 3 or Box 4.
  - c) Finally the UCITS calculates the global exposure of the individual scenarios to assess compliance with the global exposure limit of 100% of NAV.
3. Structured UCITS which satisfy the criteria set out in paragraph 2 (a) – (d) and which were authorised before 1 July 2011 are not required to comply with Boxes 1 to 25 of these Guidelines provided they comply with any rules set by their home State competent authority for the calculation of global exposure.

### Explanatory Text



90. In accordance with the requirements of paragraph 3 of Box 1 it is the responsibility of the UCITS to select an appropriate methodology to calculate global exposure. According to Box 29 the UCITS may calculate the global exposure of each individual scenario using the commitment approach. The characteristics of each individual scenario must be compatible with the use of such an approach. This excludes scenarios relying on complex investment strategies or exotic derivatives, as stated in paragraph 4 of Box 1.
91. Structured UCITS for the purposes of the UCITS Key Investor Information (KII) requirements are defined as UCITS which provides investors, at certain predetermined dates, with algorithm-based payoffs that are linked to the performance or the realisation of price changes or other conditions, of financial assets, indices or reference portfolios or UCITS with similar features. The KII provides a broad definition of structured UCITS; however, only those structured UCITS which satisfy the criteria in paragraph 2 may calculate the commitment approach using the method outlined in Box 29.
92. For each UCITS portfolio a number of different scenarios may be generated based on the possible payoff outcome at maturity. CESR expects that UCITS should not include a significant number of different scenarios as this would raise issues regarding proper disclosure and investor comprehension.
93. No actively managed UCITS or UCITS which do not follow a formula-based approach and offer investors a predefined payoff can use the approach set out in Box 29. A UCITS which follows a CPPI strategy is not considered to be passively managed. Where the structured UCITS gains exposure to an underlying fund or index or other type of managed portfolio, this must also be passively managed.
94. UCITS are required to provide redemption facilities to investors in accordance with Article 84 of the UCITS Directive. Investors who redeem units in these structured UCITS prior to maturity do not benefit from the predefined payoff and can be subject to the volatility of the underlying assets and fluctuations in the net asset value. It is considered that structured UCITS with longer maturities could increase these volatility risks to redeeming investors and a maximum period is therefore proposed.
95. UCITS which use derivatives that incorporate a barrier-type feature are required to ensure that the maximum loss the UCITS can suffer when the payoff switches from one scenario to another is limited. For example, if the reference index at maturity is higher than its initial value the investor will receive back his or her initial subscription plus a percentage of this increase. If the index value has fallen the investor could receive back only his or her initial investment (or less, depending on the structure). UCITS should limit the gap between the return an investor receives at maturity when the index performance is positive and when the index performance is negative.
96. Structured UCITS authorised prior to the implementation of the CESR Guidelines on Risk Measurement and which satisfy the criteria in paragraph 2(a)-(d) of Box 29 do not need to comply with Boxes 1 to 25 of these Guidelines. This is due to the fact that the criteria in Box 29 were not in place when these UCITS were launched and if the UCITS portfolio were adjusted to comply with the new Guidelines, this would affect the pre-defined payoff to investors at maturity. This would not be in the best interests of investors as they invested in the UCITS on the basis of the pre-defined payoff. However these existing structured UCITS must not actively market their units.
97. UCITS must take into account the diversification requirements of the UCITS Directive in considering the impact of one constituent in the underlying basket on the overall payoff when the UCITS switches from one scenario to another. This means that the UCITS must identify the asset which leads to this switch and check that its contribution to the gap between the two



scenarios complies with the diversification requirements of the Directive. If the switch depends on several assets, then the contribution of each asset to the gap between the two scenarios should comply with the diversification rules. These conditions should also be applied to financial indices as they can be considered as baskets composed of the components of this index. The following examples illustrate this issue:

**Example 1**

Maturity	5 years
Underlying assets	basket of 20 shares (share 1, share 2... share 20) equally weighted. Initial net asset value of €100
Payoff	<ul style="list-style-type: none"> <li>• If the performance of one of the shares is positive then the payoff is equal to the initial net asset value plus a dividend of €30.</li> <li>• If the performance of one of the shares is negative then the payoff is equal to the initial net asset value.</li> </ul>

As the movement on the performance of one share from positive to negative value results in a variation of 30% of the payoff, this does not comply with the diversification rules.

**Example 2**

Maturity	5 years
Underlying assets	basket of 20 shares (share 1, share 2... share 20) equally weighted. Initial net asset value €100
Payoff	<ul style="list-style-type: none"> <li>• If the performance of one of the shares is positive then the payoff is equal to the initial net asset value plus a dividend of €30,</li> <li>• If the performance of one of the shares is negative then the payoff is equal to the initial net asset value plus a dividend of €26.</li> </ul>

As the movement on the performance of one share from positive to negative value results in a variation of less than 4% of the payoff, this complies with the diversification rules.

**Example 3**

Maturity	5 years
Underlying assets	basket of 20 shares (share 1, share 2... share 20) equally weighted. Initial net asset value of €100
Payoff	<ul style="list-style-type: none"> <li>• If the performance of two or more of the shares is negative then the payoff is equal to the initial net asset value of €100</li> <li>• Otherwise the payoff is equal to the initial net asset value plus a dividend of €30 i.e. €130.</li> </ul>

As the movement on the performance of at least two shares from positive to negative results in a variation of 30% of the net asset value, this does not comply with diversification rules.

**Example 4**

Maturity	5 years
Underlying assets	basket of 20 shares (share 1, share 2... share 20) equally weighted. Initial net asset value of €100
Payoff	<ul style="list-style-type: none"> <li>• If the performance of two or more of the shares is negative then the payoff is equal to the initial net asset value plus a dividend of €20 i.e. €120,</li> <li>• Otherwise the payoff is equal to the initial net asset value plus a dividend of €28 i.e. €128.</li> </ul>

As the move on the performance of two or more shares from positive value to a negative one induces a variation of at most 7% of the net asset value (the contribution of each share is less than 10%), this complies with diversification rules.



98. The following examples illustrate how UCITS applying different scenarios can calculate global exposure using the procedure outlined in Box 29.

Maturity	5 years
Pay-off	<p>The payoff at maturity is equal to the investor's initial investment plus 120% of the positive performance of the Eurostoxx 50 index.</p> <p><u>At maturity:</u></p> <p>Scenario 1 - If the performance of the Eurostoxx 50 index is positive (e.g. +30%) then the payoff is equal to the initial investment (e.g. €1,000 plus 120% of the performance of Eurostoxx 50 index (€1,000*120%*30% = €1,360</p> <p>Scenario 2 - If the performance of the Eurostoxx index is negative then the payoff is equal to the initial investment i.e. €1,000</p>

First of all, the fund must select an appropriate methodology to calculate global exposure between the one set out in the guidelines (i.e. commitment approach, relative VaR approach or absolute VaR approach).

If the commitment approach is used, the UCITS can either calculate its commitment on its whole investment portfolio or on individual scenarios.

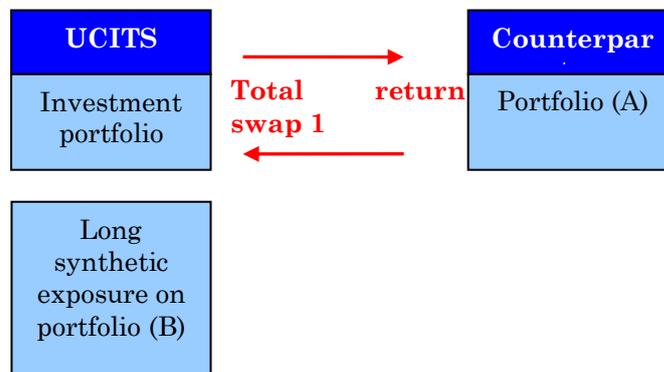
The later calculation relies on breaking down the final pay-off of the UCITS into separate, alternative scenarios and on applying the commitment approach and diversification rules to each individual scenario. The outcome of this calculation depends on how the UCITS is structured.

<p>The alternative scenarios into which the UCITS can be broken down are the following:</p> <p>Scenario 1: the payoff is equal to the initial investment plus 120% of the performance of the Eurostoxx 50 index (if the performance of the Eurostoxx 50 index is positive)</p> <p>Scenario 2: the payoff is equal to the initial investment (if the performance of the Eurostoxx 50 index is negative).</p>
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**Case 1:** The UCITS enters into a total return swap (including fully funded swaps) with a counterparty

In scenario 1, the UCITS can be seen as a combination of:

- An investment portfolio,
- A total return swap which exchanges the total return of the fund investment portfolio for a portfolio (A) which offers 100% of the initial NAV and 100% of the performance of Eurostoxx 50,
- A long synthetic exposure on a portfolio (B) which offers synthetic exposure on 20% of the performance of Eurostoxx 50.





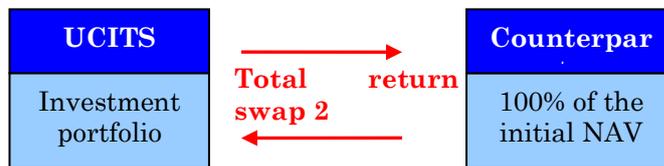
Since the combination of (a) and (b) fulfils the criteria of Box 3 of the Guidelines, the total return swap is not taken into account for the calculation of global exposure.

The long synthetic exposure on portfolio (B) is taken into account for the calculation of global exposure. Its commitment is equal to the market value of the underlying; that is 20% of the Eurostoxx 50 index.

Since the payoff under scenario 1 is equal to the initial investment plus 120% of the Eurostoxx 50, this leads to a global exposure of 0.2 for scenario 1.

In scenario 2, the UCITS can be seen as a combination of:

- a) An investment portfolio,
- b) A total return swap which exchanges the performance of that investment portfolio for 100% of the initial investment.



Since the combination of (a) and (b) fulfils the criteria of Box 3, the total return swap is not taken into account for the calculation of global exposure. This leads to a global exposure of 0 for scenario 2.

**Case 2:** The fund invests in risk free assets and enters into a performance swap with a counterparty

In scenario 1, the UCITS can be seen as a combination of:

- a) Cash invested in risk-free assets,
- b) A futures contract F1 on 100% of Eurostoxx 50,
- c) A futures contract F2 on 20% of Eurostoxx 50.

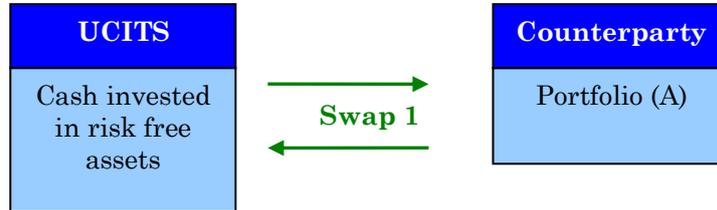


Since the combination of (a) and (b) fulfils the criteria of Box 4, future F1 is not taken into account for the calculation of global exposure.

The futures contract F2 is taken into account for the calculation of global exposure. Its commitment is equal to 20% of Eurostoxx 50. Since the payoff under scenario 1 is equal to the initial investment plus 120% of Eurostoxx 50, this leads to a global exposure of 0.2.

In scenario 2, the UCITS can be seen as a combination of:

- a) Cash invested in risk-free assets,
- b) A swap which exchanges the return of that investment portfolio for 100% of the initial NAV.



Since the combination of (a) and (b) fulfils the criteria of Box 4, the swap is not taken into account for the calculation of global exposure. This leads to a global exposure of 0 for scenario 2.

**Case 3:** The fund invests in high quality assets and enters into a swap with a counterparty

In scenario 1, the fund can be seen as a combination of:

- a) Cash invested in low-risk but not risk-free assets,
- b) A futures contract F1 on 100% of Eurostoxx 50,
- c) A futures contract F2 on 20% of Eurostoxx 50.

UCITS
Cash invested in low-risk assets
A futures contract F1 on 100% of the Eurostoxx
A futures contract F2 on 20% of the Eurostoxx

Since cash is not invested in risk-free assets, (a) and (b) cannot be combined under the provisions of Box 4. Commitment is thus equal to the commitment of the futures contract F1 plus the commitment of the futures contract F2. This leads to a commitment of 120% of Eurostoxx 50 and a global exposure of 1.2. **The UCITS does not comply with global exposure requirements.**

The UCITS can calculate its global exposure using the relative VaR approach provided the VaR model is adequate and captures the credit risk of the assets held by the UCITS.

99. Structured UCITS which provide investors with exposure in excess of 200% of the performance of an index or underlying portfolio would not meet the global exposure requirements as set out in Article 51(3) of the UCITS Directive. As such, they are not permitted.

**Box 30**

1. Structured UCITS which make use of the approach for the calculation of global exposure outlined in Box 29 must ensure that the prospectus:
  - (a) contains full disclosure regarding the investment policy, underlying exposure and payoff



- formulas in clear language which can be easily understood by the retail investor; and
- (b) includes a prominent risk warning informing investors who redeem their investment prior to maturity that they do not benefit from the predefined payoff and may suffer significant losses.

### **Explanatory Text**

100. It is important that investors properly understand the impact of the different scenarios within a structured UCITS and whether, for example, their capital is protected. The prospectus should also disclose the impact on investors who redeem prior to maturity and do not benefit from the pre-defined payoff, including capital protection where relevant.

### **Questions**

1. **Do you agree with the proposed approach for the calculation of global exposure by certain types of structured UCITS which satisfy the criteria in paragraph 2 of Box 29?**
2. **Do you agree with the proposed criteria for these structured UCITS?**
3. **Do you agree with the scope of the application of the alternative approach that derives from the criteria and global exposure calculation approach laid down in paragraph 2 of Box 29? If there are any specific criteria which could present difficulties for certain UCITS, could you elaborate on the reasons for your views and describe the types of UCITS concerned?**
4. **Can you suggest any alternative criteria?**
5. **Do you agree with the proposal to limit the maturity of structured UCITS which may apply the provisions of Box 29 to 9 years? Do you have any alternative suggestions?**
6. **Do you agree with the proposal to prohibit these structured UCITS from accepting new subscriptions after the initial offer period?**
7. **Do you agree with the proposed criteria to limit the maximum loss the UCITS can suffer under any individual scenario on any given day? Can you suggest any methods by which this loss can be limited or other safeguards which would deal with the risks posed by barrier-type features as described in Box 29?**
8. **Do you agree with the proposals regarding structured UCITS which were authorised before 1 July 2011? Do you have any alternative suggestions?**
9. **Are the examples provided in paragraph 97 useful in illustrating the diversification requirement?**
10. **Can you suggest alternative examples?**
11. **Do you think the examples in paragraph 98 correctly explain how global exposure is calculated in different scenarios?**
12. **Do you have alternative examples?**
13. **Do you agree with the proposed prospectus disclosure requirements in Box 30?**
14. **Is the terminology used in the guidelines clear? Are there any terms used for which you feel it would be helpful to have a definition?**