**ALFI contribution to the CESR´s consultation paper on Risk Measurement for the purposes of the calculation of UCITS' global exposure (Ref: CESR/09-489)**

## I. Introduction

ALFI represents the Luxembourg investment management and fund industry. It counts among its membership over 1 300 funds and asset management groups from around the world and a large range of service providers. According to the latest CSSF figures, on 31 May 2009, total net assets of undertakings for collective investment were 1.6 trillion euros.
There are 3 425 undertakings for collective investment in Luxembourg, of which 2 045 are multiple compartment structures containing 10 792 compartments. With the 1 380 single-compartment UCIs, there are a total of 12 172 active compartments or sub-funds based in Luxembourg.
According to March 2009 EFAMA figures, Luxembourg's fund industry holds a market share of 25.4% of the European Union fund industry, and according to 2009 PWC/Lipper data, 75.2% of UCITS that are engaged in cross-border business are domiciled in Luxembourg. As one of the main gateways to the European Union and global markets, Luxembourg is the largest cross-border fund centre in the European Union and, indeed, in the world.

ALFI would like to thank CESR for the opportunity to participate in this consultation. Overall we warmly welcome CESR's technical advice to the European Commission focusing on risk measurement for the purposes of calculation of UCITS' Global Exposure as a first step towards introducing greater supervisory consistency. ALFI is of the opinion that the currently undertaken changes to the Risk Management principles will have positive effects on the overall efficiency of the UCITS investment product and on investor confidence.

In this paper we present short answers to the questions raised by CESR in its consultation paper and some additional comments, which we hope CESR might find helpful. We have included references to relevant pages and paragraph numbers in CESR's paper.

### Preliminary remarks

ALFI would like to encourage CESR not to "overload" the methodology of Global Exposure. Regarding the calculation of global exposure using the commitment approach, we would like to point out that it is supposed to be a simpler approach, to be used for less sophisticated funds.

With respect to the VaR approach, CESR should take into consideration in its advice that the basis for VaR calculation of global exposure is the entire UCITS portfolio, not just the derivatives included in it; in other words, VaR represents the total portfolio risk. Furthermore, VaR only relates to market risk and does not include either liquidity or counterparty risk, and its objective is not the measurement of leverage.





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

One of the key principles of UCITS is the protection of investors. ALFI welcomes the clarification on some technical aspects concerning UCITS risk limitation. The challenge is that the UCITS risk limitations should be consistently applied/calculated whilst UCITS should be open for state of the art modern risk management approaches, i.e. open for further developments concerning Risk Management. As a result a risk management process can have market risk limitation which is based on a statistical figure (such as Volatility/VaR) which is only to a certain extend consistent to a more traditional calculation method such as a commitment approach – which principles are also used as a calculation concept for the issuer risk limitations.
All in all, we are of the opinion that Risk Management and in particular the various risk limitations shall not be viewed as single limitations – we rather understand Risk Management as an overall approach which asks the Management Companies to implement adequate measures to assure the protection of the investors.
Furthermore the recent financial crisis has shown that a focus on the Global Exposure calculation cannot protect a UCITS against losses. The ABS/MBS crisis with inter alia the liquidity risk issue as well the valuation issue has shown that an overall Risk Management is of utmost importance for the fund industry.

ALFI therefore welcomes the CESR initiative which includes the paper on Risk principles as well as the technical guidance given below.

Having said that, we think regulation should be designed as to ensure the necessary flexibility for a Management Company to set up its Risk Management procedures in line with the complexity of the respective UCITS (a long only equity fund does not necessarily request a VaR calculation). If regulations force the industry to a too high standard, the cost of such a standard sophisticated Risk Management would be a burden in particular for small and mid sized asset management firms.

As the biggest fund market within Europe, Risk Management is a key point of regulation for the Luxembourg market. Luxembourg's first regulation regarding UCITS risk management is based on the EU recommendation 2004/383/EC. The CSSF issued a Circular 07/308 in August 2007 on "Guidelines for undertakings for collective investments in transferable securities relating to the use of financial risk management method and the use of financial derivate instruments", which already reflects key aspects of CESR´s Consultation Paper. ALFI is of the opinion that the existing CSSF circulars - especially Circular 07/308 - already reflect in general the principles as well as most of the technical proposals given by CESR.

Additionally, we want to highlight that the UCITS risk management regulation is not only of interest for the fund industry incl. the regulators in Europe. Since Luxembourg is the hub for distribution of UCITS globally, we experience that regulators outside the EU do have a strong interest in UCITS Risk Management and they expect appropriate information as part of the registration respective distribution of a UCITS in their jurisdictions.





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

## 1. Calculation of Global Exposure using the Commitment Approach

**1.1 Context**

Article 51(3) of the new UCITS Directive provides that:
"A UCITS shall ensure that its global exposure relating to derivative instruments does not exceed the total net value of its portfolio.
The exposure is calculated taking into account the current value of the underlying assets, the counterparty risk, future market movements and the time available to liquidate the positions. This shall also apply to the third and fourth subparagraphs."
Global Exposure is understood to be a measure of the incremental exposure and leverage generated by a UCITS through the use of financial derivative instruments. A UCITS cannot have global exposure greater than its NAV. A UCITS total risk exposure may not exceed 200% of its NAV on a permanent basis (excluding potential increase of overall risk exposure by means of temporary borrowing of up to 10% of UCITS' NAV), which means that the global exposure of a UCITS may at most be doubled through the use of financial derivative instruments.

Given that the counterparty risk associated with over-the-counter (OTC) financial derivative instruments is specifically limited for a given entity through the provisions of article 52(1) and given that the global exposure relating to financial derivative instruments is, anyway, limited to 100% of the UCITS' NAV through the provisions of Article 51(3), the global exposure concept can be reduced to its market risk dimension.

**Questions**

**1. Do you agree with the proposed approach in relation to the calculation of global exposure?**
**2. Should the counterparty risk involved in an OTC derivative be considered in the calculation of global exposure**

1) ALFI agrees with the proposed approach of the calculation of the global exposure method.

2) The Global Exposure in this regard should be reduced to the Market Risk/Commitment only, as it is interpreted as incremental exposure and leverage generated primarily through Financial Derivative Instruments (FDI). Since Counterparty risk is considered by specific limitations (max 10%/5% per counterpart as well as within the 20% group limitation) one should furthermore adequately consider liquidity risk in the Risk Management process – but liquidity risk is likewise to counterparty risk not a part of the Global Exposure monitoring.

**1.2 Scope of the Commitment Approach**

The Commitment Approach, in compliance with the rules hereafter, is appropriate for measuring the global exposure laid down by Article 51(3) of the new UCITS Directive. The calculation process has to be applied to all the positions in financial derivative instruments, whether used as part of the UCITS' general investment policy or as part of techniques and instruments (efficient portfolio management).





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

Only those positions on financial derivative instruments that, at the level of the UCITS, generate incremental exposure are included in the calculation.
If transferable securities or money market instruments embed financial derivative instruments that qualify as embedded derivatives according to the provisions of Article 51(3) of the new UCITS Directive, Article 10 of Directive 2007/16/EC and point 23 of CESR's guidelines concerning eligible assets for investment by UCITS, then the global exposure, issuer concentration and leverage calculation rules apply to the embedded FDI element. A UCITS therefore needs to be able to separate embedded FDI from the host instrument in order to meet regulatory requirements.
If UCITS are authorised to avail themselves of repurchase transactions or securities lending transactions in order to generate additional leverage through the reinvestment of collateral, these transactions must be taken into consideration for the determination of the global exposure. The calculation process has to include any reinvestment of collateral in financial assets that yield a return greater than the risk-free rate.

**Questions**

**3. Do you agree with the proposed approach or can you suggest an alternative approach?**

ALFI agrees with the proposed approach. Assets including in a Securities lending scheme remain in the portfolio records (for accounting and risk analysis purposes) and thus are included in the Global Exposure calculation. In principle received collateral should not be taken into account for the calculation of global exposure except if (cash) collateral is reinvested – every reinvestment of collateral which exposes the fund to additional risks needs to be considered appropriately.

**4. Do you agree that the incremental exposure/leverage generated through techniques such as repurchase and securities lending transactions should be included in the calculation of global exposure?**

In principle ALFI agrees that the incremental exposure/leverage generated through techniques /instruments such as repos and securities lending should be included in the calculation of a Global Exposure - as it is a core principle of UCITS Risk Management. This means regarding securities lending transactions: The receiver of lending fees in a securities lending transaction does not generate additional global exposure by this transaction – i.e. the risk of the paper participating in a second lending scheme needs to be considered in the Global Exposure only.
Regarding repurchase agreements: If the money received from the counterparty due to a repo transaction is invested, it creates additional exposure and thus needs to be considered in the Global Exposure.



ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**1.3 Commitment Approach Calculation: General Principles**

For a given position in a financial derivative instrument, the Commitment Approach calculation converts the position into the equivalent position in the underlying asset of that derivative. The above mentioned conversion process is to be implemented for all financial derivative instruments with the exception of those positions specifically mentioned below.
The total commitment arising from the use of financial derivative instruments equals the sum, in absolute terms, of the individual commitments corresponding to the individual positions in financial derivative instruments, after taking due consideration of any netting and hedging effects according to the rules laid down hereafter. Financial derivative instruments that comply with the netting and hedging criteria may be disregarded from the total commitment calculation.
For positions on financial derivative instruments having a limited loss payoff function, like long positions on plain vanilla options or protection buyer CDS positions, two calculation methods were discussed within the Technical Working Group on risk measurement:
- Option 1: UCITS may refer to a risk-based approach and the maximum theoretical loss may be used as reference amount for the commitment calculation. This would mean that for a long position on an equity call, the exposure amount would come down to the market value of the option contract (for example, a UCITS is long 1 call contract on share xyz with the current MV of the option at €4, then the exposure would equal €4, and if the MV tomorrow was €5, the exposure would be €5 etc.) or for a protection buyer CDS contract the sum of the premiums to be paid during the lifetime of the contract.
- Option 2: UCITS convert the position into the equivalent position adjusted by the delta (which takes into account the likelihood of settlement) in the underlying asset.

CESR wishes participants in the consultation process to assess the relevance of the proposed options.

**Questions**

**5. Does option 1 correctly assess the market risk linked to investment in the corresponding instruments, and if so please explain?**
**6. Does option 2 correctly assess the market risk linked to investment in the corresponding instruments, and if so please explain?**
**7. Do you have any comments or other suggestions regarding other possible measurement approaches?**

**Question 5:**
Yes, in any case of buying positions of plain vanilla options the market value of the contracts could be used for the purpose of determining the market risk, as the buyer has the right to exercise the option or not. In case of protection buyer CDS positions the sum of the premiums to be paid during the entire life of the contract could be taken into account to determine the market risk under the commitment approach.





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**Question 6:**
ALFI member believe that in general one needs to consider the leverage/exposure generated by a FDI and thus we are of the opinion that option 2 might be in most cases an appropriate approach – however, there might be alternative approaches which are more adequate for some specific instruments – such deviation for the general guideline (equivalent position adjusted by the delta) needs to be explained in the Risk Management Process and disclosed to the responsible authority.
In light of the above however, some of our members argued that convexity should itself be appreciated and they would not recommend using just the delta of an option as an approximation, which is convenient at first sight but if a fund has significant exposure towards convexity the results of a standard commitment approach could be misleading. To avoid such an additional complexity as part of the commitment calculation ALFI believes that a VaR approach which considers convexity might be the better calculation approach for those investment funds.

**Question 7:**
If one wants to have a commitment approach being able to handle convexity more adequately, one could think about using at least the delta-gamma equivalent (however, as stated above ALFI is of the opinion that one should apply commitment only for funds which are not exposed to such FDIs significantly).

**1.4 Commitment Approach Calculation – Conversion Method**

UCITS shall convert the positions in financial derivative instruments into the equivalent positions in the underlying asset by taking the market value of the underlying asset or, if appropriate and conservative, the notional of the financial derivative contract.
This conversion method shall be applied to all the financial derivative instruments (with the exception of those specifically mentioned below) for which the use of the market value of the underlying asset leads to an adequate and accurate exposure amount with regard to the specific risks relating to that product.
In illustrating the Commitment Approach calculation, CESR considers it appropriate to provide an illustrative and non-exhaustive list of financial derivative instruments with the corresponding conversion method. For these products, CESR considers that the use of the market value of the underlying asset leads to an adequate and accurate exposure amount with regard to the specific risks relating to these products:

| | |
|---|---|
| **Plain Vanilla Equity option**: | market value of the underlying asset adjusted by the option's delta, i.e., number of contracts x number of shares x underlying price x delta |
| **Plain Vanilla Bond option:** | market value of the underlying asset adjusted by the option's delta, i.e., principal x underlying price x delta |
| **Plain Vanilla Warrant:** | market value of the underlying asset adjusted by the warrant's delta, i.e., number of contracts x number of shares x underlying price x delta |
| **Index future:** | market value of the underlying asset, i.e., number of contracts x value of 1 point x index level |





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Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

| | |
|---|---|
| **Bond future:** | market value of the underlying asset, i.e., number of contracts x notional x market price of cheapest-to-deliver adjusted by conversion factor[1] |
| **Forward FX:** | principal (i.e. market value of underlying asset) of the forward contract – normally viewed as the market value of the currency leg of the FX contract |
| **Interest rate swap:** | notional of the swap contract (fixed leg) |
| **Credit default swap:** | protection seller: market value of the underlying asset protection buyer: option 1: sum of premiums to be paid during lifetime of contract / option 2: market value of the underlying asset (see discussion re this measurement technique in paragraph 1.3) |
| **Total Rate of Return Swap[2]** | 1) for the basic TRORS contract market value of the underlying asset (respectively notional) 2) for non-basic TRORS contract: sum (in absolute terms) of the market value of the underlying asset of both legs (respectively the notional for both legs) |

A UCITS is not permitted to use the calculation method set out above in the case of financial derivative instruments for which the conversion of the position in the financial derivative instrument into the equivalent position in the underlying asset by taking the market value of the underlying asset (or, if appropriate and sufficiently conservative, the notional) does not provide for an adequate and accurate assessment of the risks relating to that product. Financial derivative instruments that do not qualify for the standard conversion method are, for instance, digital options (or binary options), barrier options, variance swaps or more complex options with a highly volatile delta.

In this case, if a conservative estimate of the commitment amount can be applied, the UCITS may do so. With regard to these products the commitment amount could, for instance and if possible, equal the maximum potential loss that could arise from the position. For binary options that would mean that, instead of the delta weighted market value of the underlying asset, the maximum potential loss should determine the commitment amount. (Please note that for some financial derivative instruments, such as binary "asset or nothing" options, it may be impossible to compute a maximum potential loss and an alternative conservative approach must be adopted.)
However, as this approach does not take into account the sensitivity to market movements, it should be used only if these investments represent an ancillary part of the UCITS investments, and do not impact significantly the level of risk of the UCITS.

[1] The conversion factor is the factor used to "equalise" for the difference in issue terms between the notional bond underlying a bond futures contract and the real bonds eligible for delivery. When multiplied by a bond futures price, the conversion factor translates the futures price to an actual delivery price for a given deliverable bond, as set at the delivery date of the corresponding contract (ref www.eurexchange.com).

[2] The determination of the commitment for a protection buying position through a TRORS on the basis of a contract's notional value only applies in those cases where the buyer does not hold the underlying asset in the portfolio.



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**Questions**

**8. Do you agree with the proposed approach, in particular the inclusion of a non-exhaustive list of financial derivatives?**

ALFI agrees in principle with the proposal. Luxembourg Management Companies have received guidance from CSSF in the Circular 07/308 – appendix 1 - lists the calculation methods and ALFI welcomes in principle the methods laid down in the circular as an adequate way to calculate the commitment approach and we have received the possibility from CSSF to have a discussion on selected instruments - i.e. we welcome the idea of an illustrative non-exhaustive list for the most common FDI. Hence, we welcome the clarification from CESR that the UCITS itself can apply in cases where the conversion method is not adequate a conservative estimate of the commitment amount.
All in all, one needs to keep in mind that non linear risk from some FDIs cannot be captured by the approach – i.e. the approach is not equally conservative with regards to the different asset classes. The full risk provision suggested by identifying risk=market value of contract (like in a forward FX) is much more protective than the one computed in the case of plain vanilla option, for which non-linear effects such as convexity are left uncaptured by a delta-approximation.

**9. Do you have any alternative suggestions for the conversion method?**

ALFI members believe that we need to have a standardised approach and think the conversion approach fits for fund managers who do not invest to a wide extent in complex FDIs. However, we do see the challenge coming from non-linear risks which are potentially not captured adequately in the Risk Management – i.e. we propose funds having high exposure to complex FDI with significant impact to the overall fund risk profile, one should apply adequate measures - e.g. a VaR calculation. Since it is not always possible to get reliable delta position for each FDI, we recommend using a delta of 1 as a prudent approach if no exact delta is available (i.e. only for cases where such a simplification does not lead to a underestimation of the risk).

**10. Are there other types of financial derivative instruments which should be included in the paper?**

No, as indicated above CSSF has given a non-exhaustive list of financial derivatives.





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**11. Are you aware of any type of financial derivative instrument where global exposure cannot be calculated using the commitment approach?**

We do see a challenge for funds with high exposure in complex FDIs (non-linear risks) to use a commitment/leverage approach. In such a situation one should rather use another calculation method to monitor the Global Exposure. In our opinion, the maximum loss approach would also be possible for binary "asset or nothing". ALFI members are not aware of instruments where the maximal potential loss could not be determined.

**1.5 Types of financial derivative instrument which are not included in the global exposure calculation**

Where the use of a derivative does not result in any incremental exposure for the UCITS the underlying exposure is not included in the commitment calculation. For example, a TRORS, the purpose of which is to swap the total return of a financial asset held in the UCITS portfolio for the total return of another financial asset, need not be taken into consideration for the purpose of the calculation of the total commitment when the swap in question does not subject the UCITS to the market risk of the asset held and when it does not include either leverage clauses or other additional risks as compared to a pure and simple holding of the reference financial asset. This reasoning can be extended to cases in which the performance swap involves several assets or even the entire portfolio. CESR considers that there is no incremental exposure arising from such a use of the TRORS as there is simply a substitution of the exposure of another financial asset for the exposure on a financial asset directly held in the UCITS portfolio. As a consequence, if a TRORS exchanges the exact performance of assets held by the UCITS against other assets, for the purposes of calculating the commitment of the UCITS, those assets, the performance of which is exchanged, are replaced in the portfolio by the performance of those received. For example, TRORS that do not provide incremental exposure or leverage (i.e. exposure is created on an un-leveraged basis) as calculated using the commitment approach will not have to be taken into account in the commitment approach calculation process.
Another example that could be considered is where a UCITS holds financial derivative instruments and cash, the derivative instruments concerned are not considered to generate incremental global exposure (leverage) up to the value of such cash positions. UCITS that employ cash-equivalent instruments that generate an investment return (e.g. money market instruments) must calculate their global exposure in the normal manner.

**Questions**

**12. Do you agree with the approach regarding TRORS and derivatives with cash or an equivalent position?**

ALFI agrees with CESR's approach regarding TRORS and derivatives with cash or an equivalent position, as stated under 1.5.



ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**1.6 Sensitivity approach for derivatives on interest rates in the commitment calculation**

For interest rate related financial derivative instruments that only expose the UCITS to general interest rate risk, UCITS may use a sensitivity-based approach instead of the standard Commitment Approach. The aim of the sensitivity approach is to have a more risk-based approach to interest rate instruments than the standard approach proposed in paragraph 1.4. Indeed, there is a much larger range of risk and volatility between interest rate instruments of various maturities than there is between two different equity indices: the sensitivity of a 20-year bond can indeed be 80 times bigger than the sensitivity of a three-month money-market instrument. The sensitivity approach allows UCITS to take this particular feature of interest rate instruments into account.

Under this method, the commitment related to a financial derivative instrument is calculated in a similar way to the one used in the standard method (market value of the underlying asset or notional), except that the amount is multiplied by the ratio between the sensitivity (or modified duration) of the financial instrument and the maximum sensitivity of the portfolio.

› The standard definition of the sensitivity (or modified duration) of a financial instrument is equal to the opposite of the derivative of the market value of that financial instrument with respect to the interest rate, divided by the value of the instrument.

› The maximum sensitivity for a UCITS is equal to the higher of the following two values, as specified in the full prospectus: the absolute value of the maximum sensitivity and the absolute value of the minimum sensitivity. For instance, if the sensitivity interval mentioned in the prospectus is [-2; 4], the maximum sensitivity will be 4. If it is mentioned [-3; 1], the maximum sensitivity will be 3. As some UCITS may not disclose a sensitivity range in their prospectus, a default mechanism sensitivity should be defined and used only for UCITS that do not disclose a sensitivity range. This default maximum sensitivity should be conservative (low), as a situation where a UCITS has incentives not to disclose its sensitivity range to take a higher level of risk without appropriate investor disclosure would not be acceptable.

For example, the commitment of an interest rate swap is the sum, in absolute terms, of the individual commitments of the two legs, measured by the product of the notional of the contract and the ratio between the sensitivity of the leg and the maximum sensitivity. For an interest rate option, the calculation is similar, except that it takes into account the delta of the option.

This method allows the use of a risk-weighted approach to interest rate instruments, considering their specific nature; however, it does not take into account other risks that can be contained in such instruments such as credit risk. Therefore the exposure to credit derivatives cannot be taken into account through this approach and the standard approach proposed in the commitment paper should in such a case be maintained.

The value of derivatives calculated using this sensitivity approach is added to the value of all other positions in the portfolio using the commitment approach to calculate the UCITS' overall global exposure.





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**Questions**

**13. Do you agree with the proposed use of the sensitivity approach?**

In an effort to formalise risk calculation methods as to better monitor interest-rate risk, the approach by sensitivities is an important pillar. It presents however, fundamental pitfalls lying in the hypothesis used: linear approximation of products ignore the second-order risks, and thus do not allow to discriminate between pure, linear interest-rate products and sophisticated ones. An approach by integration of convexity component might be a solution.

**14. Do you consider that this should be compulsory for these types of derivative or optional for UCITS?**

Given the complexity of such a sensitivity approach ALFI's members would suggest that its use should be optional.

**15. Do you agree with the analysis of the sensitivity approach described?**

See answer above.

**16. What quantitative level would you consider appropriate for the default sensitivity?**

A large majority of ALFI members is of the opinion that Global Exposure should focus on market risk/exposure and thus we would regard default risk rather as a subtype of credit risk and it should be handled separately (however, in the existing issuer risk calculation standards used in the market there is no consideration of default probability). Furthermore, we believe default sensitivity levels should be set by the UCITS and for each fund, on the basis of a careful risk assessment.

Some members argued that, the so called "default sensitivity" is not referring to the default risk in the context of CESR paper. It rather refers to the "default mechanism sensitivity", meaning "fixed/standardised" for those UCITS which may not disclose this sensitivity range in their prospectus. They highlighted that they are not fully in agreement with the sensitivity approach, particularly with the calculation method implying the multiplication of market value of the underlying asset or notional times the ratio between modified duration of FDI and maximum sensitivity of the portfolio. Hence, they pointed out that they do not agree with the ratio calculation because by only multiplying the market value times the modified duration, the sensitivity is being considered for the commitment and we see no need of weighting the modified duration of the asset with the total portfolio. This



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Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

weighting is further taken into consideration when calculating global exposure as a percentage of NAV.

**17. Do you have any additional comments or suggestions on this approach?**

The convexity effects should be taken into consideration if a fund has significant exposure towards secondary risks; especially in some non-trivial cases (e.g. convertible bonds, options on interest-rates).
Furthermore one should keep in mind that the commitment approach focuses on the risk concerning the use of derivatives – i.e. there is not a Global Exposure monitoring of all assets in a portfolio – ABS/MBS papers which contributed to the Global Exposure of a fund significantly were not considered in the Global Exposure at all.

**1.7 Commitment Approach calculation: netting & hedging effects**

When proceeding to the calculation of the Commitment Approach, UCITS may benefit from netting and hedging effects and as such the global exposure calculation may be reduced appropriately for derivative instruments that meet the criteria.
The consideration of netting and hedging effects, as further described hereafter, can only be done for equivalent amounts of commitment, which means that if pursuant to the consideration of the netting or hedging effects, there remains a residual global exposure position on financial derivative instruments (e.g. over hedging), then the UCITS must include this residual exposure when calculating the global exposure.
In all cases, the application of any netting or hedging should not result in the UCITS neglecting obvious and material risks, and so the only allowed purpose of these transactions shall be to reduce the market risk of the portfolio. Specifically, the consideration of netting and hedging effects must not ignore positions on financial derivative instruments that are aimed at implementing specific investment strategies (example: long/short strategies, straddle strategies) designed to generate additional returns to the fund that, from a risk perspective, are not neutral for the UCITS. In such situations, the netting or hedging of these instruments is forbidden.

**1.7.1 Consideration of netting effects**

Netting can be done between financial derivative instruments and between financial derivative instruments and security positions (for instance stocks, debt securities).
Netting between long and short positions on financial derivative instruments is possible provided that they refer to the same underlying asset, regardless of the contracts' due date (for instance long call position and short call position on same underlying asset).
Netting between financial derivative instruments and assets held directly by a UCITS is possible provided that the two positions refer to the same underlying asset (for instance long cash position on share xyz and synthetic short position on share xyz).





ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**1.7.2 Considering of hedging effects**

CESR is considering whether it is appropriate to permit UCITS to hedge positions in derivatives against related security positions. In these circumstances positions in financial derivative instruments that are solely used for the purpose of hedging partially or totally the market risk (general and specific market risk) relating to positions of the UCITS may be netted against the related security positions provided that through the use of such derivatives an undeniable and manifest risk reduction at the level of the portfolio can be observed. For illustration purposes, one could think of a UCITS concluding bond future contracts to hedge the general interest rate risk relating to its positions on debt securities.

UCITS that want to benefit from such hedging effects must be able to demonstrate that the prices of both the positions to be hedged and the financial derivative instrument always move in opposite directions and demonstrate a strong and negative correlation in all market conditions. This would prohibit, for example, hedging a long equity portfolio with a stock index if the equity basket and the index have not been adequately chosen to maximise the risk reduction deriving from the hedging, or to hedge a long equity portfolio of natural resource companies with a short investment in a commodity index.

**Questions**

**18. Do you agree with the proposals regarding netting?**

ALFI agrees with the proposals regarding netting.

**19. Do you have any additional comments and/or proposals?**

No, we do not have any additional comments.

**20. Do you consider that hedging as described above should be permitted?**

Yes, provisional other metrics than correlation, such as Betas between assets, are involved so as to compute the degree of hedging that can be achieved or the relative weight of both components to have an efficient hedging. The regulation should not purely concentrate on a high numerical correlation coefficient.

**21. Do you consider that the strong correlation requirement should be further clarified by means of a quantitative threshold e.g. 0.9?**

No. The decision on quantitative figures should be further clarified and this is not achieved properly by the simple means of the correlation level. Indeed, correlations of 0.9 have not the same statistical relevancy whether they have been computed with a long or a short time-series. However, this does not necessarily mean that





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regulation needs to be defined on such a detailed level – alternatively, industry associations shall recommend best practice standards assuring that those were applied by Management Companies, which of course have the ultimate responsibility to assure adequate protection of the investors.

**22. Can you suggest a possible threshold e.g. for the minimum correlation between stock baskets? Please justify your answer based on relevant market data.**

ALFI members believe that hedging should be permitted, but no strict quantitative thresholds should apply. Instead of having a threshold defined by regulation we propose that the decision on thresholds should be left to the discretion of the UCITS/Management Company, as its level depends on how each fund is structured.

**1.8 Computation of concentration risk arising from the use of financial derivative instruments**

The Commitment Approach, as detailed above, must be used by the UCITS to determine the issuer concentration limits arising from the use of financial derivative instruments in all cases. In addition, issuer concentration risk must include any counterparty risk associated with the same issuer in respecting the UCITS limits.

**Question**

**23. Do you agree with this proposal?**

In general ALFI agrees with the approach to use same calculation principles (i.e. delta adjusted positions – conversion method) for the issuer limitation as well. However, as indicated in the discussion above (answer 16), it might be worth considering instead of purely the market value of a security the default risk as part of issuer risk – otherwise one limits an issuer with high credit ratings (AAA) likewise to an issuer with low credit worthiness 10 % (if government 35%) of the NAV.

By applying the conversion approach to e.g. derivatives having government issues as an underlying (such as Bund or Bobble futures) in a commitment approach as well as in the issuer calculation without considering the default risk, it appears sometimes difficult for fixed income funds to use such futures for their duration management efficiently. Thus, it might be worth to discuss whether one could adjusting the standard commitment approach with a default probability factor to calculate some issuer risk more adequately (in particular concerning fixed income futures such as Bund considered in the government exposure).

See also above answer 16.





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**Definitions**

1. Total Rate of Return Swap (TRORS) - See Sections 1.4 and 1.5
The basic TRORS contract is defined as a bilateral contract between a total return payer and a total return receiver whereby the total return payer pays the total return of a reference asset (i.e., short position on reference asset) and receives from the receiver of the total rate of return (i.e., long position on reference asset), in principle, a floating rate payment (for instance LIBOR) plus a spread.
The non-basic TRORS contracts as those where, instead of the floating rate payment leg, the TRORS refers to a fixed rate payment or to the total return of another reference asset.

2. Market Risk
Market risk includes both general market risk and specific market risk.

3. Delta factor
The delta factor presented in the option conversion formulae measures the sensitivity of the option price with regard to the underlying asset (e.g. bond, equity) price change. It describes numerically how similar the option behaves to the underlying asset. If the delta is close to zero, the option will hardly respond to movements in the underlying asset, which means the option does not behave like the underlying asset. If, on the other hand, the delta approaches unity, the option moves one-for-one with the underlying asset and so behaves very much like it.

**Calculation of Global Exposure using the Value at Risk (VaR) Approach**

**2.1 Definition of VaR**

VaR measures the worst expected loss at a given confidence level (probability) over a specific time period under normal market conditions. For example if the VaR (1 day, 99%) of a UCITS equals $4 million, this means that, under normal market conditions, the UCITS can be 99% confident that a change in the value of its portfolio would not result in a decrease of more than $4 million in 1 day. This is also equivalent to saying that there is a 1% probability (confidence level) that the value of its portfolio could decrease by $4 million or more during 1 day, but the level of this amount is not specified (i.e. it could be catastrophic).
Market practice in UCITS over the last number of years suggests that there are 2 main approaches to using VaR, namely the relative and absolute VaR measurement approaches. These are more fully described in paragraphs 2.6 and 2.9 below.

**Questions**

**24. Do you agree with this definition? Do you have any alternative suggestions?**

In general ALFI's members agree with the definition – although some comments from our side:





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We consider the terminology "expected" to be misleading since VaR is not mathematically defined as an expected value, but as a quantile metrics. We recommend rephrasing it as follows: "Given a predefined confidence probability level p, and a specific time period T, VaR is defined as the theoretical cumulated loss amount over period T that will be exceeded with a probability (1-p) exceeds the VaR is (1-p)".

Furthermore the wording 'normal market conditions' is not defined and thus we recommend a wording such as 'stable market conditions'. The assumption is that the market conditions will be quite similar to the conditions at the VaR calculation during the specific time period.

We like the example which helps to 'translate' the VaR concept into a figure – to show the influence of the parameter to the final VaR, it might be worth having a matrix showing the different VaR results by simply changing the parameter (99% vs 95% - 10 days vs 20 days etc).

**2.2 Compliance of the VaR methods with the provisions of Directive 85/611/EC**

It is important to stress that Article 51(3) of the new UCITS Directive requires that "A UCITS shall ensure that its global exposure relating to derivative instruments does not exceed the total net value of its portfolio." While the commitment approach calculates global exposure as a percentage of NAV (and clarifies the extent to which the UCITS is in compliance with the limit set out in Article 51(3) of the new UCITS Directive), VaR does not calculate global exposure in the same way; it measures the probability of risk of loss rather than explicit leverage levels. It is also important to note that Article 51(3) of the Directive also states that "the (global) exposure is calculated taking into account the current value of the underlying assets, the counterparty risk, future market movements and the time available to liquidate the positions". Such wording envisages a risk-measurement methodology such as VaR as the VaR calculation explicitly respects these criteria.

Nonetheless, it is possible that when using VaR, a UCITS may generate higher levels of leverage than that which would be allowed were the same positions measured using the commitment approach. However, while the commitment approach might be more precise in measuring leverage (or global exposure) on a conservative basis, VaR is a better measure of market risk and, thus, might be more adequate to fulfil the requirements set out in the Risk Management Principles paper e.g. adequate assessment of market risk and in particular concentration and interaction of risks.

Given the above, it is important to consider how VaR enables a UCITS to comply with the requirements of the UCITS Directive and whether any additional requirements concerning the calculation of total leverage generated by the UCITS through derivatives should be considered. It is indeed clear that strategies such as 200% long and 200% short strategy on equities could meet all requirements for using a VaR approach (especially for the absolute VaR limit) while clearly generating a global exposure greater than 100% of NAV through derivatives (as calculated using the commitment approach).





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**Questions**

**25. Do you agree with the above approach?**

A large majority of ALFI members is of the opinion that a VaR approach is more suitable to measure the potential market risk inherent in an UCITS portfolio - which is exposed to a certain extent to complex FDIs - than the commitment approach although its main objective is not the measurement of leverage. Furthermore one should highlight that a VaR should consider all portfolio holdings instead of focusing on FDIs only.
But it has to be taken into account that the VaR measurement only relates to the market risk and does neither include liquidity nor counterparty risk as proposed in article 51 (3) (but this shortcomings are likewise an issue for the commitment approach). We think that 'one size fits all needs approach/figure' is not possible and thus a VaR figure to monitor the market risk of a fund plus additional measures to capture counterparty risks, liquidity risk, adequate cover risk etc. might be a solution to achieve the overall regulatory goal – i.e. to protect the fund's investors adequately.
Some ALFI members highlighted that if a fund' s Global Exposure is calculated by an VaR approach, there is no additional need to have a commitment approach in place. (It seems to be that in some jurisdictions there is probably a link between the commitment calculation approach and the calculation method requested for the so called 'cover rules' – i.e. funds might be asked to calculate the VaR to limit the global exposure and are in the same time asked to calculate a commitment approach to monitor the FDI cover rule)

**26. What additional safeguards (if any) are necessary for UCITS which use VaR to calculate global exposure to ensure consistency with the total exposure limit of 200% of NAV?**

ALFI members would prefer to have a consistent approach to the 200% NAV exposure and therefore we believe a relative VaR limitation is preferable. Furthermore the VaR approach should be complemented by stress tests which do give further information about the risk behaviour of a fund under not 'normal' market conditions and give information about the degree of non linear risk patterns of a fund.

**2.3 Common VaR calculation models**
A variety of models exist for estimating VaR. Each model has its own set of assumptions, its advantages and drawbacks. Common models include the parametric (variance-covariance) model, the historical simulation model and the Monte Carlo simulation model.
As every approach has its advantages and drawbacks, the choice of model must depend on the investments strategies and financial instruments used in the UCITS, and remain the responsibility of the UCITS. For example, a UCITS could choose to carry out a parametric VaR rather than a Monte Carlo VaR or use other



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methodologies based on e.g. volatility if it judges that the UCITS' market risks are adequately taken into account by this methodology.

**2.4 Input used in the calculation of VaR**

The UCITS must use input that best fits with the strategies and the behaviour of markets. The length of the data history used in the calculations has to be suitable. In particular, it must make a prudent decision between the need to take into account extreme situations and the importance of overweighting recent events. The observation period should be at least one year, this period may be shortened or recent events overweighted during extreme market conditions. Whatever the data used and the calculation of parameters, the UCITS has to test the models used in order to check that all parameters are well calibrated.

**2.5 Organisation and means of a UCITS/asset management company using VaR**

The risk management unit with responsibility for the VaR calculation should be independent of the units in charge of managing and marketing the UCITS. The UCITS should use VaR methods that are consistent with best market practices and are also in accordance with CESR guidelines on risk management principles for UCITS.

The model used must be internally validated by the UCITS by a function which is independent from that responsible for building the model. The model must be adequate and effective, integrated into the investment process of the UCITS, based on suitable back testing. UCITS should ensure that the VaR models used capture adequately all the risks linked to the portfolios and take into account all the cash and derivative instruments in the portfolio. It must develop documentation on the VaR models used, describing the operating principles of the models, the methods used to validate the models, the validity range of the models and the monitoring of the implementation.

The UCITS must carry out a complete and rigorous stress testing programme to identify events or factors which could substantially affect the portfolio's level of risk. The stress tests must be based on quantitative criteria (concerning market and liquidity risks) and provide for qualitative criteria. The UCITS must record and analyse the results of all calculations carried out in order to check that the models measure satisfactorily the UCITS' risks, which means in particular that performance tests must be run to check that the variations of UCITS' NAV are consistent with the measurements of risk (back testing), in accordance with CESR's paper on risk management principles for UCITS. If it appears that the back testing results reveal a too high percentage of exceptions, the UCITS must review the VaR model and make appropriate adjustments. Where the back testing results give rise to consistently inaccurate estimations and an unacceptable number of exceptions competent authorities reserve the right to apply stricter criteria to the use of VaR.

**Questions**

**27. Do you agree with the approach outlined in paragraphs 2.3, 2.4 and 2.5?**

In general ALFI agrees with the approach outlined in the paragraphs 2.3, 2.4 and 2.5.



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However, it might be challenging to have beside the people being responsible for building the model another independent department in the same Management Company which can internally validate the model in detail (very difficult in terms of technical equipment and technical skills).
We think that it might be the role of internal audit or compliance function to assure an independent check of the set up of the risk management function in general and the risk model used in particular.
Furthermore we do agree on the need for liquidity stress test (asset and liability side) but it is in our view not part of the Global Exposure discussion but rather an additional aspect to be considered in an overall Risk Management approach.
If a Management Company has delegated the calculation of risk figures to a third party, it is in our view the responsibility of the Management Company to perform independent controls concerning the validity of the risk model used by the service provider.

**28. Do you have any comments or suggestions?**

We do agree on the need for liquidity stress test (asset and liability side) but it is in our view not part of the Global Exposure discussion but rather an additional aspect to be considered in an overall Risk Management approach.

**29. Do you consider that VaR should be calculated at least daily?**

We consider it is essential to calculate VaR at least on a daily basis. Daily data is required to perform accurate back tests and ensure the effectiveness of risk monitoring. Nevertheless, if a fund calculates its P/L less frequent than the VaR no appropriate back testing for the days without NAV calculation is possible. The back testing frequency correlates with the NAV frequency. For investment compliance purposes we are of the opinion, that the VaR frequency should be at least the NAV frequency, for internal Risk Management purposes the VaR should be calculated at least daily.

**30. What type of criteria should competent authorities take into account in an assessment of the VaR Models?**

We believe that for assessment purposes one should take into account the nature and volume of FDIs being used by the UCITS (significant amount of FDIs with non-linear pay-offs might be difficult to capture in delta normal approach). In addition a transparent back testing procedure should be in place and the results should be disclosed to the competent authority approved the UCITS.

Competent authorities should assess a model based on the following criteria:

- Its internal system vs. official system
- Its risk models (esp. for derivatives and structured products…)



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- Its market Data
- Its degree of automatisation
- Its completeness (are all risks taken into consideration in the model)
- Its fidelity to account for observed facts, i.e. its propensity to reproduce stylised facts which are observed in financial markets, such as fat tails, stochastic volatility
- Its resilience to back-testing, i.e. there is a need to put the model in the laboratory to see how it evolves
- Its documentation: what is the purpose of the model, where do limitations lie, what are the hypothesis that are used?
- Its duality with complementary stress-testing
- The use test of the model: it should be understood by users, embedded in actionable escalation processes and duly reported to relevant stakeholders

**31. Do you consider that VaR models should be approved by competent authorities?**

In principle we agree that the competent authority should approve the model – as part of the Risk Management Process approval process – however, the regulator can be supported by technical experts of the audit firms being in charge of the fund's audit – such an audit result needs to be disclosed to the regulator in a sufficient detail level. Furthermore the fund's auditor should asses the model on a regular basis.

**2.6 Definition of the relative VaR**
Under the relative VaR approach, the calculation of the global exposure of the UCITS follows these steps:
• Calculate the VaR of the UCITS' current portfolio (which includes derivatives): different methods may be used to this end, see above for more details on VaR calculation methods;
• Calculate the VaR of a reference portfolio (which will be a non-leveraged derivative-free portfolio): the consistency with the VaR method and parameters used to calculate the VaR of the UCITS must be ensured;
• Check that the VaR of the UCITS is not greater than twice the VaR of the reference portfolio in order to ensure a limitation of the global leverage ratio of the UCITS to 2.

The global exposure equals to (VaR UCITS – VaR Ref Portfolio) / VaR Ref Portfolio x 100, and is less than 100%.

**2.7 Limits of the relative VaR approach and proposed safeguards**
The use of a relative VaR approach may require additional safeguards to ensure consistency with the global exposure limit as stated by the UCITS Directive. Indeed:
• The Value at Risk may not be an adequate tool to assess the leverage if the VaR itself does not capture all the risks of the UCITS:
• The reference portfolio must be appropriately chosen.




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To illustrate this last bullet point, the following example can be used of a UCITS that would:
• invest 100% of its net assets in European stock market,
• take additional synthetic positions of 120% long positions and 120% short positions on European stock markets.

Then a simple calculation of the global exposure through the commitment approach may, in most cases, come to a 240% global exposure. However, depending on the selected VaR method (historical, Monte-Carlo) and the market data (ex: recent historical variations of the stock value), the VaR of the global portfolio may, as data are combined together, happen to be smaller than twice the VaR of a European stock market benchmark.
Another limit of the relative VaR approach is that the VaR for some reference portfolios may be quite high: the VaR of sectoral benchmarks in emerging countries can be very high, and thus allow for a very high risk allowance when doubled and, in some cases, this may be greater than local thresholds used by Member States for absolute VaR calculations.
A relative VaR method does not strictly limit the leverage of the strategies, as it allows UCITS to double the risk of loss under a given VaR model and not to double the exposure. However, it creates a clear link between the risk of loss of the reference portfolio and the risk of loss of the UCITS, and the similarity of risks between the reference portfolio and the UCITS' portfolio should prevent the UCITS using highly leveraged strategies. But as previously mentioned, the calculation of leverage does not replace risk management measures. Hence, the use of the relative VaR approach does not exempt UCITS from establishing appropriate risk management measures and limits.
There is a risk that some UCITS might be tempted to build the reference portfolio in a way that "games" the calculation of the relative VaR. In order to ensure that UCITS do not use relative VaR to generate excessive leverage the following additional requirements are proposed:

- The reference portfolio must not contain financial derivatives or embedded derivatives to avoid any leverage inside the reference portfolio itself; if short positions are used in the reference portfolio, then the absolute sum of long and short positions must be equal to 100% of the NAV of the UCITS.

- The reference portfolio must have a risk profile that is very close, if not identical, to the UCITS' portfolio. The UCITS' portfolio must be scaled back to an unleveraged reference portfolio which must be consistent with the investment objectives and policies of the UCITS (as provided in the fund rules and the prospectus). It must also adhere to the investment limits (but not necessarily to the issuer limits) set out in the UCITS Directive). For the avoidance of doubt, a long-only benchmark cannot be used as a reference portfolio for a long/short strategy, since it would not entail a similarity of the risk profiles of the reference and UCITS portfolios.

- The reference portfolio can be based on a combination of unleveraged market indices that is consistent with the investment strategy, it can also be inferred from a target allocation, an asset allocation observed over the recent period, or a statistical analysis of the market risks of the portfolio. Where a choice must be made between different reference portfolios, the portfolio with the lower potential market risk level must be chosen. For the avoidance of doubt, this implies that an





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emerging markets index cannot be used as a reference for a portfolio invested in less volatile markets.

- If the modifications of the risk/return profile of the UCITS portfolio are very frequent or the definition of a reference portfolio is not possible, the relative VaR method should not be used.

- The UCITS must maintain a written procedure detailing the selection and approval of the reference portfolio.

**Questions**

**32. Is the proposed 3-step relative-VaR approach adequate to limit the global exposure of a UCITS?**

ALFI members welcome the proposed 3-step approach, but wishes to draw CESR's attention to the limitation of the VaR approach in the measurement of the leverage (see comments under 2.2.). Regardless of the above mentioned approach we are of the opinion that the relative VaR approach is an adequate limitation of the Global Exposure of a UCITS.

**33. Do you consider that the proposed limitations on the reference portfolio constitute reasonable and adequate safeguards to ensure that the relative VaR method does not result in the UCITS taking excessive risk or leverage?**

The proposed 3 step relative VAR approach is in our view in principle an adequate approach to compare the risk of a portfolio against its benchmark.

However, in a few details one probably should think about exceptions of a reference portfolio for UCITS using long/short strategies and commodities or convertibles (or any other financial Instrument which includes by nature FDIs).

Examples:

- Clarification that allowed convertible bonds indices are eligible as reference portfolio is needed.
- Clarification that allowed commodity indices are eligible as reference portfolio is needed.

**34. What additional safeguards (if any) do you consider necessary?**

ALFI believes that stress tests and CVaR could be considered as additional safeguards.



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**2.8 Definition of Absolute VaR**

The alternative VaR methodology that a UCITS can adopt is the absolute VaR approach. This, in simple terms, limits the percentage VaR that a UCITS can have relative to the NAV. Given that this measure is not referenced to a derivative-free portfolio as used in the relative VaR method, it is important that the absolute VaR limit is suitably conservative and reflects the existing non-derivative limits applied to UCITS when considering the risk of loss of, for example, the default of an issuer. Given that VaR measures the worst expected loss at a given confidence level (probability) over a specific time period under normal market conditions, it is proposed that absolute VaR with a 99% confidence level over a 20 working day holding period must not exceed 20% of the UCITS net asset value. This 20% limit can be equated to the 20% risk of loss on issuer-concentration.

The threshold is defined for a specific time period and a given confidence level but these two last parameters are scalable either upwards or downwards. The UCITS can use other parameters and the VaR limit can be scaled to the particular time period and confidence level chosen. In that case, the UCITS must convert the regulatory VaR threshold into a new one based on the chosen parameters by supposing the UCITS returns are independent and normally distributed[3] and using the following concordance table.

| Confidence level | Coefficient of normal distribution |
|---|---|
| 99% | 2.326 |
| 97,50% | 1.96 |
| 95% | 1.645 |
| 90% | 1.282 |

$$VaR(y\%) \approx coeff(y\%)/\ coeff(x\%) \times VaR(x\%)$$

For example, if the UCITS uses a probability of 95% in its own processes, it can convert it using the coefficient of normal distribution: VaR(99%) ≈ 2.326 / 1.645 x VaR(95%).
In the same way, it is possible to move from a time period to another one by using the square root of the time:

$$VaR(x \text{ days}) \approx \sqrt{x} / \sqrt{t} \times VaR(t \text{ days})$$

For example, VaR(5 days, 95%) ≈ VaR (20 days,95%)/ √4.

Consequently, the regulatory absolute VaR constraint is equivalent to the following one:
VaR (95%, 5 working days) ≈ 1.645 / 2.326 / √4 x VaR (99%, 20 working days). ≤ 7% x NAV

The competent authority must not authorise a UCITS to go beyond these limits.

[3] This assumption is used only to allow UCITS to choose the parameters that best fit the UCITS' strategies.



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The UCITS may fix a lower threshold if it estimates that it is more appropriate considering its strategy and its risk profile.

**Questions**

**35. Can the absolute VaR be considered as an appropriate way of measuring global exposure?**

Absolute VaR measures the potential loss of the whole portfolio which is different from the approach considering a Global exposure on derivatives. It is an appropriate approach to measure Global Exposure meant as market risk on the whole portfolio (including assets and derivatives). We are of the opinion that in principle the relative VaR limitation is the preferable approach – however, not always conceptually and technically easy to apply. Nevertheless, if a fund cannot apply a relative VaR due to conceptual or technical issues one should define an absolute VaR limitation which reflects the overall risk profile of that fund. (please see our comment below).

**36. Do you consider that the proposed thresholds are suitable? Can you suggest other thresholds?**

To apply 20 % as standard for all funds is not appropriate – thus, one should define absolute risk limitations which depend on funds asset class and which should be defined within the responsibility of the Management Company and disclosed to the responsible regulator. The limit definition is therefore highly specific and should not be predetermined by regulatory requirements. The risk assessment in the Management Company is a suitable place.

**37. What are your views on the application of stricter criteria to difference types of asset classes e.g. bonds, equities?**

Please see our comment above

**2.9 Additional safeguards to mitigate the risks related to the use of the absolute VaR approach**

Absolute VaR measures potential loss rather than leverage. There is a risk that the use of the absolute VaR method could result in UCITS strategies using high levels of leverage with an inadequate risk management system that does not take into account fat tail risk. In addition, non sophisticated investors may not be able to understand the precise risk profile generated by the strategies.

UCITS that engage in arbitrage strategies, where the mixture of long and short strategies leads to fat tails (adverse movements of both long and short legs) but low VaR, may incorporate high levels of leverage. It is recommended that UCITS, resorting to leveraged arbitrage strategies while measuring their global exposure





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with absolute VaR, take appropriate additional measures to monitor their risk profile (use of stress-testing, CVaR or other methods able to detect the potential impact of low-probability market events). Investors should also be provided with sufficient information about the existence of leverage risk and the corresponding level of risk taken by the UCITS on the respective long and short legs. Under these conditions, the use of the absolute VaR method might result in the UCITS taking exposures that would not be consistent with the application of the commitment approach; this situation is justified by the fact that by using a more sophisticated and sensitive risk management system (VaR, completed by additional risk management measures), the UCITS may be authorised to take into account, through the VaR method, the risk-reduction effects of highly-correlated long and short positions.
Additionally, UCITS may hold assets where the risk profile cannot be adequately captured by the computation of an absolute VaR. Structured securities, credit-linked financial instruments or financial derivative instruments designed to limit the maximum loss at a given confidence level are examples of such assets. In these circumstances, it is advised that the use of absolute VaR should be forbidden unless appropriate additional risk management methods (such as stress-testing) ensures that both the maximum loss and the sensitivity to market movements in adverse conditions are consistent with the result of an amplification of market movements by a factor lower than 2 (maximum leverage).
In addition, there should be a requirement that the marketing of UCITS that exhibit a potentially high level of leverage should include specific due diligences and procedures from the person or entity in charge of marketing the UCITS in order to ensure a good understanding of the specificities of the UCITS' risk profile by their clients or potential clients.

**Questions**

**38. Do you consider the proposed safeguards, such as the use of appropriate additional risk management methods (stress-testing, CVaR) and the disclosure of the level of leverage, are sufficient safeguards when the absolute VaR method is used in the context of arbitrage strategies or complex financial instruments?**

We are of the opinion that stress tests and adequate disclosures as part of enhanced investor information in the prospectus (maybe also in the KII) should be in principle standards applied for a UCITS having an absolute VaR limitation.

**39. Should UCITS using strategies that are potentially highly leveraged under the absolute VaR method be subject to specific marketing provisions, either at the level of the UCITS (minimum initial investment) or during the marketing process?**

As mentioned in Question 38, it is adequate to have further information concerning leverage risks for the investor, but there is in our view no need for specific marketing provisions. However, it might be worth and may be helpful to have an exchange of arguments within CESR working groups (concerning KII).





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**40. Can you suggest alternative safeguards and/or requirements to avoid UCITS engaging in strategies which generate high levels of leverage?**

ALFI members emphasise strongly that a robust Risk Management is essential. CESR risk principles have laid down that an overall Risk Management Process is required and that the individual Risk Management should fit to each fund.
A UCITS has to demonstrate (beside the VAR and other risk limitations) that the fund meets its payment and delivery obligations coming from FDIs (cover rules). Furthermore there is the general need to have sufficient liquidity in the fund – i.e. UCITS Risk Management asks for an overall Risk Management approach and thus it remains in the responsibility of the Management Company to assure adequate procedures to capture the risk of a UCITS. Since UCITS risk profiles are quite different, there is no standard for additional safeguards.

**3 OTC Counterparty Risk Exposure**

**3.1 Background and Introduction**
Article 52(1) of the new UCITS Directive states that "the risk exposure to a counterparty of the UCITS in an OTC derivative transaction may not exceed:
10% of its assets when the counterparty is a credit institution referred to in Article 50 (1) (f), or 5% of its assets, in other cases."

Additionally, Article 52(2) confirms that "a UCITS may not combine:
• investments in transferable securities or money market instruments issued by,
• deposits made with, and/or
• exposures arising from OTC derivative transactions undertaken with a single body in excess of 20% of its assets."

The Commission Recommendation clarified the requirements in relation to the calculation of counterparty risk exposure[4] The Recommendation states that "the exposure per counterparty in an OTC (should be) measured on the maximum potential loss incurred by the UCITS if the counterparty defaults and not on the basis of the notional value of the OTC." In calculating this exposure, UCITS are recommended to use the mark-to-market approach, including an add-on methodology to reflect the potential future exposure[5].
A recent PWC comparative analysis[6] noted that there is a lack of consistency in, inter alia, the calculation methodology for OTC counterparty risk across Member States. The report also details some of the different counterparty risk methods used by those Member States who have provided guidance in this regard.

[4] In addition to proposing the approach to calculate the exposure, the Recommendation also confirmed that the underlying constituents to index-based derivatives do not have to be combined with the issuer concentration limits referred to above.
[5] By reference to Annex II of Directive 2000/12/EC
[6] Investment Funds in the European Union: Comparative analysis of use of investment powers, investment outcomes and related risk features in both UCITS and non-harmonised markets (European Commission DG Internal Markets – 2007).


ALFI a.s.b.l. - 59, boulevard Royal - L-2449 Luxembourg - www.alfi.lu - e-mail: info@alfi.lu
Adresse Postale : B.P. 206 L-2012 Luxembourg - Tél.: (+ 352) 22 30 26-1 - Fax : (+ 352) 22 30 93

**3.2 OTC counterparty risk calculation methodology**

Counterparty risk exposure measures how much a UCITS could lose if their OTC counterparty defaults. The additional safeguards required by the UCITS Directive that mitigate this risk exposure (such as daily valuation of OTC contracts, independent verification of such valuations, the requirement that OTC contracts are fully liquid and requirements on the credit quality of the OTC counterparty) should be taken into account in determining an appropriate methodology for calculating counterparty risk exposure across all Member States.
Due to the existence of these compensating controls and requirements in the UCITS Directive, CESR considers that the "add-on" for future credit exposure is not necessary as this inflates the risk exposure in a subjective manner. CESR also proposes that the use of risk-weightings should not be permitted. This approach greatly simplifies the calculation of counterparty risk while also recognising that the amount calculated represents the full current amount at risk.

It is therefore recommended that the counterparty risk associated with the use of OTC financial derivatives should be calculated as the positive MTM of the OTC contract.

A UCITS may net OTC exposures with the same counterparty in order to ensure adherence to the 5% or 10% limits. It is recommended that that netting positions with the same OTC counterparties be permitted provided legally enforceable (by the UCITS) netting agreements are in place. It should also be understood that the netting rules are only applicable to all OTC contracts with the same counterparty and not to any other exposures the UCITS may have to the counterparty.
**Questions**

**41. Do you agree with the proposed method for calculating counterparty exposure?**

We agree that the calculation method as part of the overall counterparty process needs to be harmonised – and at ALFI level we agree in particular to the proposal not to have the third step of the calculation approach – i.e. the use of risk-weightings should not be permitted. The calculation of add-on factor needs from our point of view harmonised across the EU countries – if regulations ask for add on calculation at all.

**42. Can you suggest an alternative method?**

We do not see an alternative approach which would fit into the UCITS risk framework. If add-on would be recommended by legislation/regulation we would be in favour of a fixed factor (e.g. 10% to the unrealised P/L) regardless the instrument and the maturity of the contract – this would reduce the complexity in the calculation method.





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**43. Do you agree with the approach for netting arrangements?**

To assure an adequate counterparty risk management the Risk Management function needs to have a deep understanding how to mitigate risk and thus the Risk Management function needs to understand the netting possibilities based on standardised agreements such as ISDA. In principle we do agree to the netting procedures outlined above. However, for us it is not clear why there should be no netting with other exposures the UCITS has with counterparty, as long as sufficient netting-agreements are in place. Furthermore we are of the opinion that the Risk Management function needs to be involved in a proper due diligence (approval process) and follow up on the agreements' validity is necessary.

**44. Do you consider that additional netting rules should apply?**

ALFI members do not believe that additional netting rules should apply.

**3.3 Treatment of collateral received**

Collateral may be used to reduce counterparty risk exposure once the prudential collateral rules in Directive 2006/48/EC are applied and that the collateral:

- is marked-to-market on a daily basis and exceeds the value of the amount at risk;
- is exposed only to negligible risks (e.g. government bonds of first credit rating or cash) and is liquid;
- is held by a third party custodian not related to the provider or is legally secured from the consequences of a failure of a related party;
- can be fully enforced by the UCITS at any time.

It is recommended that these four principles identified above should be respected, with a strong view that the liquidity of any collateral received is of paramount importance. It is clear that a majority of Member States impose collateral rules by identifying the specific instruments that can be used as eligible collateral, while the Commission Recommendation uses principles as opposed to identifying specific instruments. Therefore it is proposed to develop a detailed set of regulatory principles which would provide a more robust and flexible approach, and that these principles would need to be more detailed than those set out in the Commission Recommendation.

The following set of high-level principles is therefore recommended:

- Liquidity – any collateral posted must be sufficiently liquid in order that it can be sold quickly at a robust price that is close to pre-sale valuation. Collateral should normally trade in a deep liquid marketplace with transparent pricing. Additionally collateral with short settlement cycles are preferable to long settlement cycles as assets can be converted into cash more quickly.
- Valuation – collateral must be capable of being valued on at least a daily basis and the possibility of "stale prices" should not be allowed. An inability to value collateral through independent means would clearly place the UCITS at risk, and this would also apply to "mark to model" valuations and assets that are thinly traded.





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• Issuer credit quality – as collateral provides secondary recourse, the credit quality of the collateral issuer is important. This may involve the use of haircuts in the event of a less than "very high grade" credit rating. It should be reasonable to accept collateral on assets that exhibit high price volatility once suitably conservative haircuts are in place.
• Correlation – Correlation between the OTC counterparty and the collateral received must be avoided.
• Collateral diversification (asset concentration) – there is an obvious risk if collateral is highly concentrated in one issue, sector or country.
• Operational and Legal risks – collateral management is a highly complex activity. As such, the existence of appropriate systems, operational capabilities and legal expertise is critical.
• Collateral must be held by a third party custodian which is subject to prudential supervision not related to the provider or is legally secured from the consequences of a failure of a related party;
• Collateral must be fully enforced by the UCITS at any time.
• Collateral cannot be sold or pledged.

While it is clear that the above principles need more analysis and rules (for example specific haircuts), the benefit of such an approach would be to allow a flexible regulatory approach that would assist both home regulators and industry participants. It can also be argued that the role of collateral is as a risk mitigator and the question of whether such collateral should be UCITS compliant is not relevant.

**Questions**

**45. Do you agree with the proposed approach to agree a set of principles in relation to acceptable collateral to reduce counterparty exposure? Do you have alternative suggestions?**

We do agree with the implementation of eligibility criteria as to the collateral and we estimate that the high-level consideration will develop a consistent approach across Europe. Notwithstanding, the list of accepted collateral should not be reduced to assets "exposed only to negligible risks (e.g. government bonds of first credit rating or cash)", there should be a possibility to add more volatile assets such as common stocks given a sufficient haircut and liquidity.

**46. Do you consider that rather than following principles based approach specific instruments that can be used as eligible collateral should be identified?**

We think that it's not reasonable to limit eligible collateral to certain instruments since that leads to an unnecessary loss of flexibility and may lead to higher costs of collateral.





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**47. Should collateral be UCITS compliant in terms of asset eligibility and diversification?**

We do not share the concept that a diversification comparable to UCITS concentration limits is necessary (in particular when cash only or AAA-sovereign bonds are of utmost quality are given as collateral). Concerning eligibility using a prudent approach with appropriate haircuts and the already mentioned high level guidance there should be no need to define eligible assets for collateral.

### 3.4 The treatment of collateral passed

Although Article 32 of the new UCITS Directive requires that the assets of the UCITS is entrusted to the depository for safe-keeping, it is clear that market practice requires collateral or margin to be passed by the UCITS in respect of a derivative transaction (whether exchange traded or OTC). Such passing of collateral represents a portion of the assets of the UCITS legally passing from the UCITS depository to the derivative counterparty (although the UCITS still bears the market and credit risks associated with such collateral). The UCITS Directives and Commission Recommendation are silent on this point.

It was agreed that the provision of collateral may form part of a derivative contract permitted by Article 50(1)(g) of the new UCITS Directive and is therefore not in conflict with Article 32.

It is clear that an exposure is created that represents a risk-of-loss to the UCITS (i.e. the loss of the collateral in the event of, say, a bankruptcy). It was therefore agreed that any collateral passed should be captured on a net basis (in the case of over-collateralisation) either in the issuer-concentration limit of 20% (Article 52(2)) or in the 5%/10% OTC counterparty limit.

**Questions**

**48. Do you agree that collateral passed to a derivative counterparty should be include in the either the 5%/10% OTC counterparty limit or the 20% issuer concentration limit?**

It depends on the way the collateral is provided. If the collateral is only pledged to the OTC counterparty there is no reason to include the net part in the overall counterparty exposure. If the collateral is completely transferred, adding the overall counterparty to limits is reasonable. The essential point is that the margin is remote safe in cases of bankruptcy of the counterparty. For exchange traded derivatives (margin calls) there seems no need to add an exposure for the respective CPs, since default is negligible in that case.





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**49. Do you have any other suggestions as to how such collateral passed should be treated?**

For us there is no purpose to add the over collateralisation to the limits for single OTC-transactions since the collateral might be provided and received on an UCITS – counterparty level and not per transaction.

**3.5 Counterparty limits**

It is recommended that more work is needed on the components of derivative transactions which should be included in the issuer concentration limit of 20%. This is particularly important in the case of potential netting transactions (for example between the cash security and the derivative contract) or where credit derivatives are used (such as bought credit protection on an issuer). Robust requirements are envisaged to ensure that no possibility for abuse or misinterpretation exists.

**Questions**

**50. What areas of further work should be carried out with regard to this?**

No comment.

**Sophisticated / Non-Sophisticated UCITS**

The Commission Recommendation introduced the concept of sophisticated and non-sophisticated UCITS depending on the methodology used to calculate global exposure. In general non-sophisticated UCITS were recommended to use the commitment approach and sophisticated UCITS may use the VaR statistical approach.
Different practises have evolved in Member States regarding both the use of commitment versus VaR approaches and the distinction between a sophisticated and non-sophisticated UCITS. No common definition has emerged, for example some competent authorities define certain financial derivatives as sophisticated or complex, others consider the overall investment strategy and the majority of competent authorities do not provide any guidance in this area. This has resulted in confusion among industry participants (including investors) regarding these terms.
In general the decision regarding the methodology used to calculate global exposure is a matter for the UCITS. This decision is not so much based on the distinction between sophisticated or non-sophisticated but rather on the choice of the most appropriate methodology given the UCITS strategy and types of derivatives used.
It is proposed that provided proper safeguards and parameters are introduced governing the use of both the commitment and VaR approaches used to calculate global exposure the terms sophisticated and non-sophisticated have no relevance and should be abandoned.





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**Questions:**

**51. Do you agree with the proposal to abandon the use of the term sophisticated and non-sophisticated UCITS?**

Since we have seen the challenges for the Luxembourg industry due to the need of classification of funds, we agree to have no formal categorisation into sophisticated and non-sophisticated. Hence, we agree with the abandon of these terms especially for the communication to the investors, as they only confuse and cannot be used as comparative between different UCITS.
We welcome the clarification that the choice of the approach is a decision of each UCITS itself. Only the UCITS can – as part of its risk assessment - define which approach is the most appropriate one. Regulators should give guidance concerning the requirements for each approach as described, but instrument-based decisions or any other automatism made from regulators shall be avoided because of resulting inflexibilities (one single instrument in a small percentage to the UCITS NAV shall not force the UCITS to use the VaR approach, if the risk of these instrument have been analysed and the UCITS concluded, that the commitment approach captures all relevant risks. However, we understand that the calculation approaches for each fund should be disclosed to the competent authority.

**52. If you object to this proposal could you please provide reasons for this view?**

ALFI agrees with CESR's proposal to abandon the use of the term sophisticated and non-sophisticated UCITS.





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