Contribution

To: Consultation Paper CESR/09-489

"CESR's technical advice at level 2 on Risk Measurement for the purposes of the calculation of UCITS' global exposure"

By EM Applications

About EM Applications

EM Applications (www.emapplications.com) is a leading supplier of investment risk solutions to asset managers and securities firms. Asset managers rely on EM Applications' systems to monitor and operate long-only, long-short, hedge and fund of funds strategies. Securities firms use EM Applications' systems in proprietary trading and derivatives and to support the services they deliver to their clients. By delivering portfolio risk analytics to the fund manager's desk in the form of a dynamic Excel workbook, EMA's risk system is uniquely well suited to helping asset managers fully integrate risk analysis into their investment process.

Feedback

Item	Question	Response
1	Do you agree with the proposed approach in relation to the calculation of global exposure?	No. Our view is that the whole notion of "Global Exposure" as expressed is impossible to implement and, in any case, not relevant to the stated key requirement of investor protection. In relation to the lack of practicality, the "time available to liquidate the positions" cannot comprise part of an exposure calculation. We agree that liquidity is very important and UCITS should have an obligation to maintain a portfolio sufficiently liquid to meet any obligations arising through investor redemptions, but we do not agree that liquidity can be incorporated into an exposure measure. In addition, we do not think exposure as proposed is relevant to investor protection. For investors the two key issues are: (i) the maximum level of risk of a UCITS and (ii) the relationship between the investors' expected level of risk for the UCITS and their experience of risk while invested in it. As there is no direct connection between the level of Global Exposure and the level of risk of a fund (a fund with a high exposure to a low risk strategy could be less risky than a fund with a low exposure to a high risk strategy), we do not believe that Global Exposure as expressed is fit for purpose.
2	Should the counterparty risk involved in an OTC derivative be considered in the calculation of global exposure	No. As above, we do not believe that "Global Exposure" is either a practical or useful measure. This question itself supports our view. Counterparty risk clearly has the potential to create a loss for investors, but there is no obvious way to take account of Counterparty Risk with either a Commitment or VaR approach to the estimation of the degree of exposure. The present approach, where the maximum exposure to any Counterparty is limited, is the most practical way to limit this risk. However, given the

		improvements there have been in collateral handling systems, we would suggest that the maximum exposure to any counterparty, through OTC derivatives, be reduced to 5% from the present 10%.
3	Do you agree with the proposed approach or can you suggest an alternative approach?	No. We do not believe that the Commitment Approach is a useful measure as it does not have a direct connection to investment risk which is the key concern from an investor protection point of view. A fund with a low Commitment measure could be significantly riskier than a fund with a high Commitment measure. We recommend that use of VaR be applied to all funds as VaR is a direct measure of investment risk and the use of a single approach across all funds will aid investor understanding.
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?	Yes. Wherever investment risk is taken, in seeking to add returns, the assets creating such risk should be considered part of the investment portfolio and therefore included in the risk calculation. Where collateral can reasonably be considered riskless it should not need to be included in the risk calculation.
5	Does option 1 correctly assess the market risk linked to investment in the corresponding instruments, and if so please explain?	No. Option 1 is a measure of maximum loss and will, in many cases, significantly overstate the market risk of an option position.
6	Does option 2 correctly assess the market risk linked to investment in the corresponding instruments, and if so please explain?	No. Option 2 will understate the risk arising from an option position as option prices are also sensitive to changes in volatility and interest rates and not just the underlying.
7	Do you have any comments or other suggestions regarding other possible measurement approaches?	Yes, we recommend that a VaR approach be used wherever options are included in a UCITS as VaR can take account of all the influences on an option price.
8	Do you agree with the proposed approach, in particular the inclusion of a non-exhaustive list of financial derivatives?	No. Some of the proposed measures will understate market risk while others will overstate. We do not believe that Commitment is appropriate for UCITS holding derivatives and that a VaR approach should be used for all such funds. We agree with the last paragraph which states that the proposed method should only be used where derivatives are only an ancillary part of the UCITS, though believe that statement muddies the waters as we then need a definition and measure of “ancillary part”. Regulatory clarity would be improved if <u>any</u> use of derivatives required the calculation of VaR.
9	Do you have any alternative suggestions for the conversion method?	Yes, VaR should be applied whenever a UCITS invests in derivatives.
10	Are there other types of financial derivative instruments which should be included in the paper?	No. It is impossible for a regulatory paper to reflect the specifics of asset types and to keep up with financial market developments and it would be better to place the burden of

		applying appropriate risk measures on the manager.
11	Are you aware of any type of financial derivative instrument where global exposure cannot be calculated using the commitment approach?	We do not believe that either global exposure or the Commitment approach are, in practice, useful as risk measures. Hence, it is possible to "calculate" a "global exposure" for any derivative if a method is enforced by regulation, but there are few derivatives for which Commitment or global exposure are useful risk measures. For example, comparing the position of an interest rate swap that exchanges LIBOR for 1 year UK Gilts with a swap that exchanges 5 year gilt for SP500, they might both have the same "global exposure" or "Commitment" but the risk of one would bear no comparison to the risk of the other. As the example further shows, the calculation is not simply a function of the particular derivative but also needs to take account of the other positions in the portfolio.
12	Do you agree with the approach regarding TRORS and derivatives with cash or an equivalent position?	If a derivative simply reproduces the risk and return of a security then it can be considered equivalent to a position in the security, subject to consideration of counterparty and liquidity risk and whether or not any collateral is invested in risk free or risky assets.
13	Do you agree with the proposed use of the sensitivity approach?	The sensitivity approach, as explained in the section, is only appropriate where there is no credit risk. Given this, we consider that it only has very limited applicability. Consequently, we believe regulatory clarity and investor understanding would be improved if VaR was required wherever derivatives are used.
14	Do you consider that this should be compulsory for these types of derivative or optional for UCITS?	We would not allow its use but would require VaR to be calculated wherever a UCITS invests in derivatives.
15	Do you agree with the analysis of the sensitivity approach described?	Yes, it appears technically correct, but not useful wherever there is credit risk or other assets are held in the UCITS. It would therefore only be useful for a UCITS that limited investment to bonds and derivatives of a single government issuer.
16	What quantitative level would you consider appropriate for the default sensitivity?	The stated benchmark asset.
17	Do you have any additional comments or suggestions on this approach?	We think it has only very narrow applicability and clarity would be improved if it was not allowed.
18	Do you agree with the proposals regarding netting?	We agree that netting should be allowed where the underlying asset is the same.
19	Do you have any additional comments and/or proposals?	No
20	Do you consider that hedging as described above should be permitted?	No. Even where a UCITS holds exactly the same assets as those that underlie a future, there will still be a risk as the two will not always trade in line. We think it would enhance regulatory clarity if any use of derivatives in a UCITS required the calculation of VaR.
21	Do you consider that the strong correlation requirement should be	No. Correlations vary through time, so this is not a useful or practical approach.

	further clarified by means of a quantitative threshold e.g. 0.9?	
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.	No. Correlations vary through time so the only practical approach is to measure VaR (which takes account of correlations throughout the portfolio) at appropriate intervals.
23	Do you agree with this proposal?	Counterparty risk should be measured as the mark to market value of the position, less any riskless collateral.
24	Do you agree with this definition? Do you have any alternative suggestions?	No. Words like "confident" are misleading and should not be used in relation to risk measures. "Confident" implies "certain" which will never apply to investment returns. We recommend the following definition: "VaR provides an estimate of the maximum loss in 99 days out of 100, not taking account of the 100th day when losses could be significantly greater". We note that market practice in UCITS has been to use Relative and Absolute VaR because of regulatory direction, and not because Relative VaR was a recognised approach prior to UCITS III regulations. We do not believe that Relative VaR provides for investor protection and should be abandoned and replaced by Active VaR, (the VaR of the difference between a UCITS and its benchmark) which was in use before the regulatory imposition of relative VaR and which would be more conservative.
25	Do you agree with the above approach?	Yes. We agree that VaR is a better measure (than commitment) of market risk and therefore better at meeting the investor protection objective.
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?	We note that the concept of adherence to a global exposure of 200% has been abandoned in relation to the maximum absolute VaR allowed and believe the 200% exposure concept should be abandoned in all cases for consistency and because 200% global exposure is not a useful risk measure and fails to ensure investor protection.
27	Do you agree with the approach outlined in paragraphs 2.3, 2.4 and 2.5?	2.3 We agree strongly 2.4 It is not practical for a manager to suddenly start using a short observation period VaR when market conditions are extreme. It could take months to put processes in place. We recommend that the regulations require the calculation of both a "long term" and a "short term" VaR at all times. We do not believe regulations should specify the parameters of either the "long term" or "short term" approach – as 2.3 stated "the choice of model must depend on the investment strategies and financial instruments used". However, all UCITS that invest in derivatives should calculate both a long term and short term VaR as this is the best way to ensure investor protection. 2.5 We are broadly in agreement with this clause so long as the burden on the manager is made appropriate to the degree and complexity of the investment strategy. For example, the degree

		of backtesting etc necessary for a portfolio buying long options should be much less than that for a portfolio writing complex options.
28	Do you have any comments or suggestions?	It is not possible to backtest an investment strategy that is based on human decisions. Testing the daily performance of a UCITS will often produce odd results due to the timing of the valuation point in relation to market closes. For example, many benchmark indices are priced on market close but many UK based UCITS are priced at 12 noon UK time. That difference will cause a drift in the relative performance that a VaR calculation cannot predict. Managers should, therefore, be able to do backtesting on weekly return observations, to minimise this timing effect, and should be allowed to check their models using simulated portfolios that mimic a proposed or actual strategy. We have no knowledge of what would constitute a "complete" stress testing programme and would recommend that "complete" be replaced with "appropriate".
29	Do you consider that VaR should be calculated at least daily?	No. That is excessive for many portfolios. The manager should have discretion over the frequency that VaR is calculated, so long as it is at least monthly.
30	What type of criteria should competent authorities take into account in an assessment of the VaR Models?	The VaR model should be appropriate for the investment strategy of the UCITS. It should have a credible methodology for estimating the contribution to VaR of all of the assets to be invested in.
31	Do you consider that VaR models should be approved by competent authorities?	No, the burden should be on the manager to use an appropriate model. The Depositary should have a duty of care to consider the manager's representations about why the model is appropriate and should challenge the manager if they do not feel the rationale is convincing. Approval would introduce considerable risks into the industry because all such models only produce estimates of risk, not "accurate risk limits" and an "approval" could open the way to litigation when, inevitably, risk estimates turn out to be too low.
32	Is the proposed 3-step relative-VaR approach adequate to limit the global exposure of a UCITS?	No. The approach would allow a UCITS to have twice the risk of a high risk benchmark such as the NASDAQ. Such a UCITS could, in due course, suffer catastrophic losses which would damage the brand image of UCITS globally.
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?	No, as the section states, it would still allow the use of an emerging markets sector index as a reference portfolio to produce a UCITS with twice the exposure to and twice the risk of that index. This is wholly inappropriate for a publicly marketed fund. There seems to be a fundamental confusion in the question between risk and leverage – they are very different things and there is no direct relationship between them.
34	What additional safeguards (if any) do you consider necessary?	We recommend that Relative VaR be abandoned and replaced with Active VaR (the VaR on the difference portfolio comprised of the assets of the UCITS less the assets of the benchmark).

		Where the benchmark is cash, Active VaR is equal to Absolute VaR. Using Active VaR for UCITS with non-cash benchmarks would bring the treatment of absolute and relative return funds into line for a much simpler regime overall.
35	Can the absolute VaR be considered as an appropriate way of measuring global exposure?	No, it is not a measure of exposure. However, it does serve the key objective of investor protection, whereas global exposure does not, so we support the use of Absolute VaR as set out. Our recommendation would be to accept that the purpose of the global exposure limit was to limit risk, and move on from there to the use of VaR as the most appropriate way to achieve that objective.
36	Do you consider that the proposed thresholds are suitable? Can you suggest other thresholds?	The proposed maximum absolute VaR of 20% at 99% confidence over 20 days seems appropriate to us, though the exact level is a policy matter not a technical matter. We do not agree that managers should be able to use other confidence levels or holding periods. For VaR to be meaningful to investors we must all be measuring the same thing. It is right that different methods should be used to estimate VaR, as the science is still developing and we need to learn from competition between methods, but we must all measure the same thing or the results will not be comparable and will be confusing. For example, if we wish to measure a long distance there are many methods that may be appropriate, but if one team measures in miles and another in kilometres the results will be very confusing for onlookers.
37	What are your views on the application of stricter criteria to difference types of asset classes e.g. bonds, equities?	We would leave the choice of method and frequency of measurement to the manager to take account of the different measurement risk (duration of relevance of a risk estimate) of different strategies.
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?	No. The important issue is to communicate to investors that a particular strategy, while typically low risk, might face catastrophic losses under extreme market circumstances. We do not think stress tests, CVaR or leverage reporting will achieve this since, by definition, the event that causes the catastrophic loss cannot be forecast, although the degree of exposure to such “fat tail” events will (or should) be known by the manager. Our approach would be to preserve the distinction between “sophisticated” and “non-sophisticated” funds with the former being those the manager recognises have the potential for losses much larger than would be anticipated by an observation of their typical behaviour.
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	Yes. They should be described as “sophisticated” with an explanation that, in extreme market circumstances, they could make losses much greater than would be assumed given their typical risk behaviour.

	marketing process?	
40	Can you suggest alternative safeguards and/or requirements to avoid UCITS engaging in strategies which generate high levels of leverage?	It should be clear that the management company is liable should a UCITS lose an amount in excess of its assets. The management company's insurer would then act as a further check on the strategies deployed.
41	Do you agree with the proposed method for calculating counterparty exposure?	Yes
42	Can you suggest an alternative method?	No, mark to market (less risk free collateral held) is the best method.
43	Do you agree with the approach for netting arrangements?	Yes, though we believe 10% exposure is too high post Lehman.
44	Do you consider that additional netting rules should apply?	No, the proposed rules seem appropriate to us.
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?	Yes, we agree and have no other suggestions
46	Do you consider that rather than following principles based approach specific instruments that can be used as eligible collateral should be indentified?	No, principle based is better for accommodating market developments.
47	Should collateral be UCITS compliant in terms of asset eligibility and diversification?	Yes, as collateral may constitute a large part of the assets of a UCITS.
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?	Yes, collateral is an asset of the fund and so the limits should apply.
49	Do you have any other suggestions as to how such collateral passed should be treated?	No
50	What areas of further work should be carried out with regard to this?	We would recommend the 10% counterparty limit be reconsidered (and reduced) as collateralisation makes such a large exposure unnecessary.
51	Do you agree with the proposal to abandon the use of the term sophisticated and non-sophisticated UCITS?	No. We think the distinction is very useful but should now be used to refer (sophisticated) to UCITS that may be subject to extreme losses, i.e. where the VaR loss figure is a less useful guide to the maximum loss potential. The decision over classification should be left to the manager but it would be expected to apply where leverage is high, complex derivatives

		(e.g. binary options) are used or where liquidity is low.
52	If you object to this proposal could you please provide reasons for this view?	As above, investors need to know where their normal risk experience (daily volatility) may be a poor guide to the maximum loss they could experience in an extreme event situation. A simple distinction between sophisticated and non-sophisticated (fat tailed vs approximately normal) would facilitate investor understanding of this distinction.