

Consultation on CESR's technical advice at level 2 on the format and content of Key Information Document disclosures for UCITS

Together with:

Consultation on the addendum to CESR's consultation paper on the format and content of Key Information Document disclosures for UCITS (Ref. CESR/09-552)

Comments related to Structured Funds

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1 Introduction

1.1 Presentation of Lyxor Asset Management

Lyxor Asset Management is an asset management company that is regulated in France according to the UCITS Directive. At end of July 2009, our assets under management¹ were equal to 65.4 bn Euros, including 24.4 bn of Structured Funds assets. We manage 314 Structured Funds at end of July 2009, most of them taking the form of French UCITS 3 Funds.

As shown by these data, Lyxor is among the most important players in the Structured Funds market. We are therefore very happy to be able to answer these consultations as regards the particular situation of Structured Funds.

We are also available and will be happy to answer specific questions from CESR or CESR members. Please call Alain Dubois, Chairman, Lyxor AM, tel +33 1 42 13 94 71, email alain.dubois@lyxor.com.

1.2 Definition of Structured Funds

We define here a “Structured Fund” as a fund which return is purely the result of a mathematical formula that links the return to the value of some underlying securities or indices at certain dates.

Structured Funds are often, but not always, capital guaranteed. Their underlyings are sometimes indices but more often are basket of shares. Their returns are often linked to the prices reached, at some pre-determined dates, by shares that belong to a pre-determined basket.

There are many types of structures, providing all sorts of arbitrage opportunities. The Structured Fund business is very important in Europe and very lively, with many innovations coming continuously to the market.

This definition of Structured Funds excludes securitization products. They are completely different products but they are also often named “Structured Products”.

1.3 Guarantee

Structured funds generally offer a set of guarantees at maturity of the investment: those guarantees can be either “hard guarantees” when for example a fraction or the full nominal is guaranteed at maturity of the fund. “Soft guarantees” also exist, when for example the principal protection is contingent to the performance of the underlyings.

¹ Consolidated with our subsidiary, Lyxor International Asset Management, which is also an asset management company regulated in France according to the UCITS Directive

1.4 Structured Funds serve a useful purpose for investors

Structured Funds are a form of passive management, like indexed funds. The difference is that they allow a customized risk profile, with a mix of risks and returns that is able to fit some investors needs better than pure indexed funds. A partial or total capital guarantee is part of this possible risk/return mix. The current crisis has shown the advantages of such guarantees.

Structured funds generally offer investors an exposure that is adapted to the investor market scenario anticipation over the term of the fund.

As opposed to open-ended funds (market funds / absolute return funds/ life cycle funds), structured funds allow investors to materialize and take advantage of a precise long term view and scenario of the market (for example bell-curve scenarios, moderate rise scenarios, non decrease scenarios).

The main advantage of Structured Funds as a complement to other fund investments is to provide a diversification of risk profiles. Indeed, academic research has shown that Structured Funds fulfill a useful diversification role².

2 Consultation on CESR's technical advice at level 2 on the format and content of Key Information Document disclosures for UCITS

2.1 Computation of the synthetic risk and return indicator for Structured Funds (BOX 5B and Annex 1)

We agree on the basic principle of calculating an equivalent volatility for Structured Products based on VAR, but we do not agree that we should take the maximum of 2 calculations: one made for 1-year VAR and another one made for VAR at maturity. There are many compelling reasons for using only the VAR at maturity. Please see answers to questions of the Addendum for detailed explanations.

2.2 Option of BOX 24A should be preferred to BOX 24B

We would like to reiterate the arguments against the use of risk neutral models to predict return:

2.2.1 The BOX 24 B Option is based on a methodological flaw: a confusion between real probabilities and risk neutral probabilities

Risk neutral stochastic models are models that are used in order to price options. As option theory shows, they are appropriate models to price options.

But these risk neutral models are completely inappropriate to give a view of expected returns on any asset.

² See for example the research of Edhec Risk Research Centre: http://www.edhec-risk.com/derivatives/structured_products

This is a very classical paradox in option pricing theory. See for example John Hull³, chapters 10.1 and 10.2 on one-step binomial models and risk-neutral valuation:

“The option-pricing formula in equation (...) does not involve the probabilities of the stock price moving up or down. (...) This is surprising and counterintuitive (...).

In a risk-neutral world all individuals are indifferent to risk. In such a world investors require no compensation for risk, and the expected return on all securities is the risk-free interest rate.” (...)

This result is an example of an important general principle in option pricing known as “risk-neutral valuation”. This principle states that we can assume the world is risk neutral when pricing an option. The price we obtain is correct not just in a risk-neutral world but in the real world as well.

So the risk-neutral model is a model that is efficient to price option, even if the real world is not risk-neutral.

But the idea of the KID is to give the investor an idea of the real world risk-return profile, and for this the risk-neutral world is inappropriate.

In other words, when pricing an option, we assume that the world is risk-neutral, because this corresponds to the reality of options hedging. However, this does not mean at all that the real world is risk-neutral.

The risk-neutral world is a theoretical world that is there only to provide an accurate and tractable pricing framework. Pretending that the real world is indeed risk neutral is a sort of ideological extension of the model which has nothing to do with what the model says, and is actually contrary to common sense and basic market observations. Real world includes risks, and the expected return on any asset has some relation to its risks.

2.2.2 The use of risk-neutral probabilities would lead to misleading results

A simple example of how the risk neutral world is inappropriate is to apply this theoretical world to all sorts of assets.

Let's take for example a very simple equity fund: a fund that invests 100% of its assets in an equity index, for example. In a risk neutral world, the average return of such fund would be the risk free rate of return minus the fees and expenses.

Indeed, any fund invested in any type of assets would produce the same average return: the risk free rate minus the costs. The expected return of any fund would be equal to the expected return of cash, minus the costs.

By definition, no real risk is taken into account. But what is the purpose of, for example, investing in equities if the average return is the same as the return on risk free assets? What about the equity premium, which is supported by a lot of academic research? The obvious conclusion of a risk neutral approach is that investors should invest only in risk-free assets, which have a better expected return - because they have less costs - and no risk.

³ John C. Hull: Options, Futures and other Derivatives, Prentice Hall, fifth edition

2.2.3 If the risk-neutral world is used to evaluate Structured Funds, it should also be used to evaluate other funds.

From a level playing field standpoint, it would not make sense to provide risk-neutral probabilities on Structured Funds and not for other funds. If the return of risks is discarded for Structured Funds, it should be discarded for other funds too. For the sake of having a level playing field, the probability table should be also included in the KID of any Fund, even when this is not a Structured Fund.

2.2.4 The only probabilities that make sense for investors are real probabilities, not risk-neutral probabilities

The problem for real probabilities is their evaluation.

Using historical probabilities is the only objective way of calculating real probabilities. We therefore go back to back-tests, which are the appropriate way to compute probabilities based on historical performances, but that have been discarded by CESR in the Key Information Document. We actually could build in a very objective way probabilities tables based on past simulations. Such probabilities would be relevant since they would incorporate real market data and real risk taking.

If CESR wishes to pursue the route of probabilities, CESR should use historical probabilities, based on back-tests.

2.2.5 This approach is very hard to implement in practice

If regulators want coherent calculations for all funds, they would have to decide on:

- models used;
- more importantly, which parameters are used as Greeks for the simulations: volatility, correlations etc. This may be very arbitrary in practice since those parameters do not have public prices.

3 Consultation on the addendum to CESR's consultation paper on the format and content of Key Information Document disclosures for UCITS (Ref. CESR/09-552). Answers to the Questions concerning Structured Funds

3.1 Question 7: Do you agree with CESR's proposal concerning the methodology to compute the SRRI of structured funds? If not, please explain and, if possible, suggest alternatives.

We agree on the principle where VAR at maturity is calculated and then an "equivalent" volatility is inferred by a log-normal model.

However, we believe that it is not appropriate to take the maximum of the volatility that comes from the 1-year VAR and volatility that comes from the VAR at maturity. We should only calculate an

equivalent volatility that comes from the VAR at maturity and use this volatility to classify the fund according to the risk scale.

The reasons why this seems to us not appropriate are the following:

3.1.1 The consultation recognizes that “most investors in structured funds tend to hold their investment until maturity”

This is very true and the consequence should be that the risk indicator is calculated on that basis.

The only reason why the consultation proposes to use also the 1-year VAR is that investors are allowed to redeem before maturity. This should be seen as an added flexibility for investor, but no sensible investor will ever invest in a structured fund having in mind that he will exit before maturity. Therefore it does not make to base a risk indicator on a behavior that, itself, does not make sense.

We believe that it would be more appropriate to add a specific disclaimer of the kind that is already requested by the French regulator in simplified prospectuses of French structured funds: “The fund XYZ is built on the basis of an investment on the whole life of the fund. It is therefore highly recommended to purchase shares of such funds only if your intention is to keep them until maturity of the fund. If you sell such shares early (...)”⁴.

Indeed, the text of the consultation proposes to add a “specific disclaimer to indicate, where appropriate and relevant, that the fund might have a different (lower or higher) level of risk if the investment is held until maturity or, conversely, redeemed before that date”. Since the consultation proposes to take the highest risk of the 2, the disclaimer would only have to say that the effective risk will always be lower than the risk mentioned by the synthetic indicator. This is very curious. Normally, a disclaimer is there to mention a potential added risk if something specific happens. Here the synthetic indicator would artificially increase the measure of risks, and then propose a disclaimer that the risk will always be lower!

3.1.2 The computation of 1-year VAR would be a quantitative nightmare

The computation of VAR at maturity is not based on model, but only on running the formula of the fund on past data. This is therefore heavy but not difficult to implement. There is only a requirement to calculate $260 \times 5 = 1300$ values of the formula according to past data during 5 years. This is heavy but manageable.

Calculation the 1-year VAR, as shown by the consultation, is much more difficult. It would imply calculating 1300 prices of the fund according to past data. Each price to be calculated would be a full pricing exercise and would have to be reproduced 1300 times.

We believe that no asset manager has currently the systems to do such calculations every year on each structured fund. New computing chains would have to be built and the cost for the industry

⁴ Official French wording : “Le fonds xxx est construit dans la perspective d’un investissement pour toute la durée de vie du fonds. Il est donc fortement recommandé de n’acheter des parts de ce fonds que si vous avez l’intention de les conserver jusqu’à leur échéance prévue. Si vous revendez vos parts avant le ... »

may be quite significant. And all this added work would be required only to calculate data that, in fact, are not relevant to investors, and require a disclaimer to mention that the real risks may be lower!

3.1.3 Using only VAR at maturity would not create any advantage for Structured Funds

The formula that is used to compute the equivalent volatility takes fully into account the duration of the VAR.

In other words, if the distribution of a fund is log-normal, the application of the method of Box 4 would produce an equivalent volatility equal to the historical volatility, whatever the maturity used for the calculation may be. There would be no advantage for a fund to be a structured fund, which would require finding a way to penalize them.

3.2 Question 8: Do you agree with CESR's proposal to use VaR as an (intermediate) instrument for the measurement of volatility? Is the proposed VaR-based approach appropriate to convey correct information about the relevant return volatility of structured funds?

Yes we agree with such approach, provided that only VAR at maturity is used (see question 7).

3.3 Question 9: Do you share the view that the solution proposed by CESR is flexible enough to accommodate the specific features of all (or most) types of structured fund? If not, please explain your comments and suggest alternatives or explain how the approach could be adjusted or improved.

The solution proposed by CESR, provided only VAR at maturity is used (see question 7) is appropriate for any type of Structured Fund.

We assume, however that the method that is described in Box 4 will be extended to Structured Fund that are based not only, as mentioned in the example, on only one index XYZ, but on several securities. In this case, it should be clarified that the performance of each security will be calculated for each of the week of the sample, and then, for each week, a simulated return at maturity of the fund will be computed.

3.4 Question 10: Do you agree with CESR's proposal concerning the methodology to compute the VaR-based volatility of structured funds over a holding period of 1 year? If not, please explain your comments and suggest alternatives.

As explained above in our answer to question 7, we do not agree that a 1-year VAR should be calculated.

3.5 Question 11: Do you agree with CESR's proposal concerning the methodology to compute the VaR-based volatility of structured funds at maturity? If not, please explain your comments and suggest alternatives.

We agree on the method.

3.6 Question 12: Do you agree with CESR's decision not to promote further the adoption of the delta representation approach for the computation of volatility of structured funds?

We agree, provided that the 1-year VAR approach is abandoned. We believe that the delta representation approach makes more sense than the use at the same time of the 1-year VAR and the VAR at maturity. The disadvantages are that the delta approach does not take into account the investment horizon and is also model dependent.

3.7 Question 13: Do you share the view that CESR's current proposal represents an improvement with respect to the delta representation approach? If not, please clarify why you believe that the delta representation approach may be more suitable to estimate the volatility of structured funds.

We do not share this view: the use at the same time of the 1-year VAR and the VAR at maturity would give some irrational results. The delta approach is too simple because it does not take into account the horizon of the fund, but at least it has some logic. The mix of VAR is even worse.

3.8 Question 14: Do you consider it possible and appropriate to allow the use of Monte Carlo simulations for the computation of the SRRI of structured funds? If yes, please explain whether these methods are more suitable for the computation of VaR or, directly, for that of volatility measures.

Monte Carlo simulations are risk neutral simulations. They do not make sense in the real world. Only simulations based on past performances, as proposed by CESR, can give a real view of the risks. Also, Monte Carlo simulations would introduce a discrepancy between Structured Funds and other funds, where the SRRI is computed based on historical volatility. They would also be very difficult to compute. They would be also model and parameter dependent and would therefore introduce some degree of discretion by the asset manager.

3.9 Question 15: Do you believe that it would be possible to avoid significant differences in the outcome of such simulations across management companies? What should be the key methodological requirements needed to avoid such divergences?

Only 1-year VAR is a problem in this respect. VAR at maturity is an objective data, which would not depend on models, and therefore not depend on the asset manager. On the contrary, 1-year VAR can be calculated only using pricing models and pricing parameters. Models are not identical among asset managers; many pricing parameters, like correlations, do not have public prices and would therefore be very dependent on the asset manager.