ASSET MANAGEMENT BY
LYXOR

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CESR Consultation paper on technical issues relating to Key Information Document (KID) disclosures for UCITS

Comments on Structured Funds

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1 Introduction

Lyxor is an asset management company that is regulated in France according to the UCITS Directive. At end of March 2009, our assets under management were equal to 58.5 bn Euros, including 20.4 bn of Structured Funds assets. We manage 399 Structured Funds at end of March 2009.

We welcome very much this consultation paper and recognize the excellent work that has been done. However, we believe that the insertion of Structured Funds in this framework has not been given enough attention and this is why we wish to contribute to this specific issue.

2 What are Structured Funds?

2.1 Definition

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”.

2.2 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.

2.3 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 role[1].

3 The Risk/ Reward indicator proposed by the consultation is not adapted

3.1 An appropriate Risk/ Reward indicator should be inclusive

In point 1.2 Option B, page 8 to 13, the consultation paper proposes a synthetic indicator, which is based on volatility. This indicator is not adapted to Structured Funds. We consider this as a big failure. For the sake of clarity for investors, and for the sake of a level playing field between all types of products, a synthetic indicator should be inclusive of all types of funds.

3.2 The proposed indicator is not adapted to Structured Funds

The consultation paper proposes the use of historical volatility as a measure of risk of Structured Funds, as for any other type of UCITS funds.

The consultation points out that with respect to Structured Funds “the difference with life cycle /target maturity-type funds is that, depending on market dynamics, the structured fund allocation (and hence its risk profile) can change quite quickly and drastically. For this reason no history can be deemed representative of the fund’s current allocation or suitable for the estimation of its volatility”.

Consequently, the consultation proposes the use of the historical volatility of the initial replicating portfolio for fixed maturity funds (“delta representation”) and the volatility of the “current mix” for infinite maturity products.

Such use is however not appropriate, because, simply put, volatility is not a relevant risk measure for Structured Funds, and for many other funds as well.

3.2.1 Investment horizon for Structured Funds

Structured Funds are a passive form of investment allowing investors to materialize and take advantage of their long-term views of the market. The return of the fund will be driven by the realization (or not) of the envisioned scenario and will be computed at maturity of the fund using a predefined formula.

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

Structured Funds' investors therefore usually assess the risk of their investment over a long time frame. Investors intend in general to hold to their investment until maturity (or at least till the moment when the scenario played by the funds will be deemed to have realized itself or not). This is so natural that, at the request of French regulators, French Structured Funds include a warning written in bold on their first page which says: "the (…) fund is built on the basis of an investment for the whole life of the fund (…)"[2].

Any measure of risk involved in Structured Funds must therefore be a long term risk measure, in line with the time horizon of investment into those funds.

In this perspective, volatility cannot be the right risk measure; the consultation itself pointed out in paragraph 1.2.3: "volatility models are developed, tested and implemented for short (trading) horizons, not for annual periods. Their validity cannot be generalized for longer time horizon".

3.2.2 Return distribution for Structured Funds

It is stressed within the consultation that for volatility to be a relevant risk indicator, the distribution of return of the fund should be close to normal and as symmetric as possible. The consultation rightfully points out that, if for some funds daily returns can be skewed, the distribution becomes close to normal when looking at larger observation intervals.

However this analysis does not hold true for Structured Funds and for many types of funds. Structured funds are by definition a way for investors to gain or protect themselves from the occurrence of a given market scenario at maturity of the fund. This results in a significant distortion of the distribution of return at maturity as compared to a standard normal / lognormal distribution.

The charts below show the Monte-Carlo distribution of 5-year return of:

(i) an equity fund representing a tracker in the XYZ index

(ii) a theoretical Structured Fund offering full principal protection over its life of 5 years from now (100% floor) and 130% participation in the XYZ index

(iii) the delta representation of the previous Structured Fund i.e. a portfolio consisting of a long position of 68% in the index XYZ and 32% in a 5-year zero-bond.

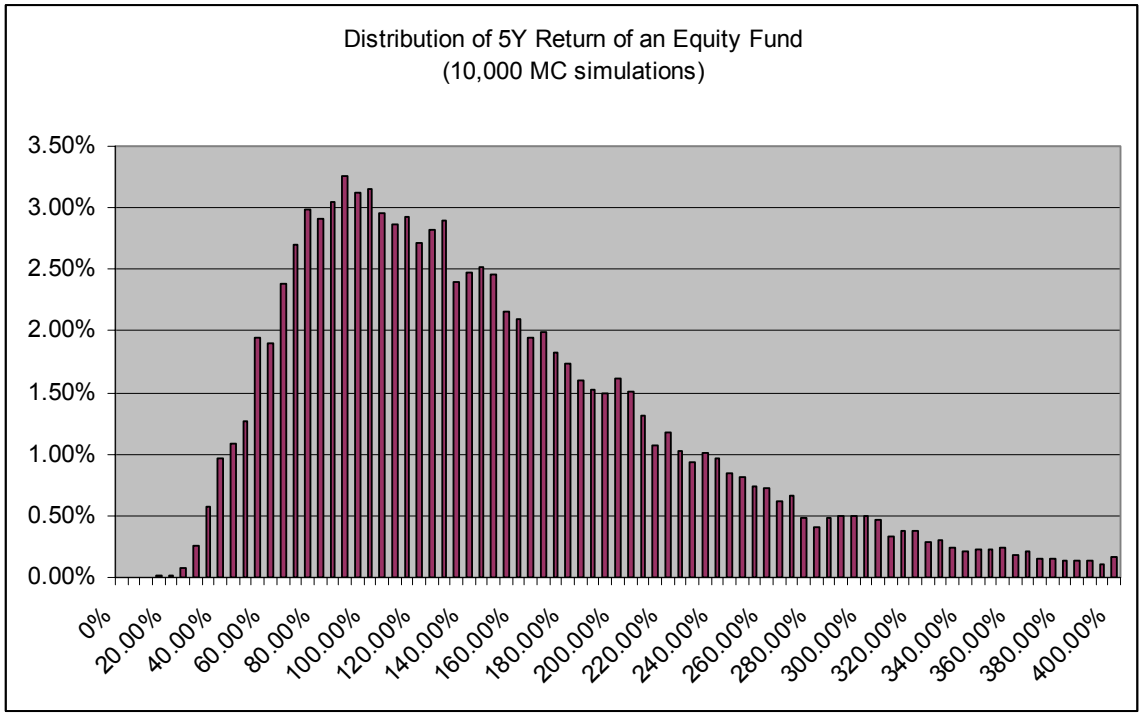
The same parameters as in the paragraph 1.2.6 of the consultation have been used for modeling purposes: interest rates of 4.7%, volatility of 25% for XYZ index.

We assumed the volatility of a 5-year zero-coupon bond to be equal to 8% and a correlation between 5-year zero-coupon bond and XYZ to be equal to -30%.

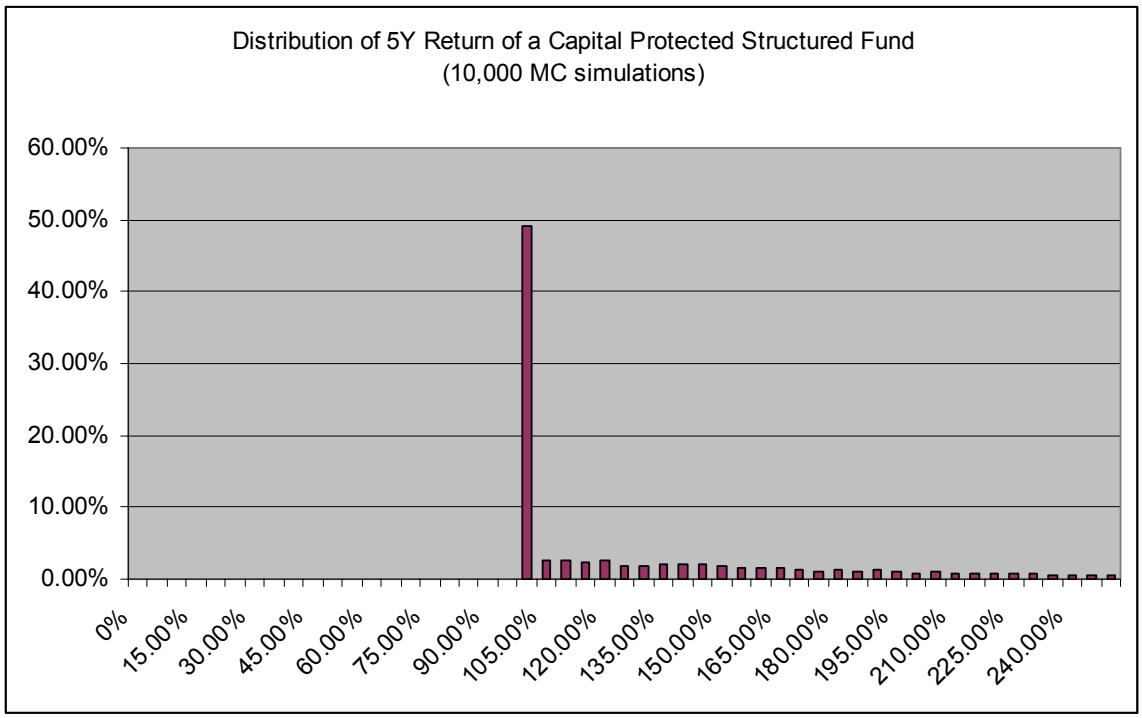
The results are the following:

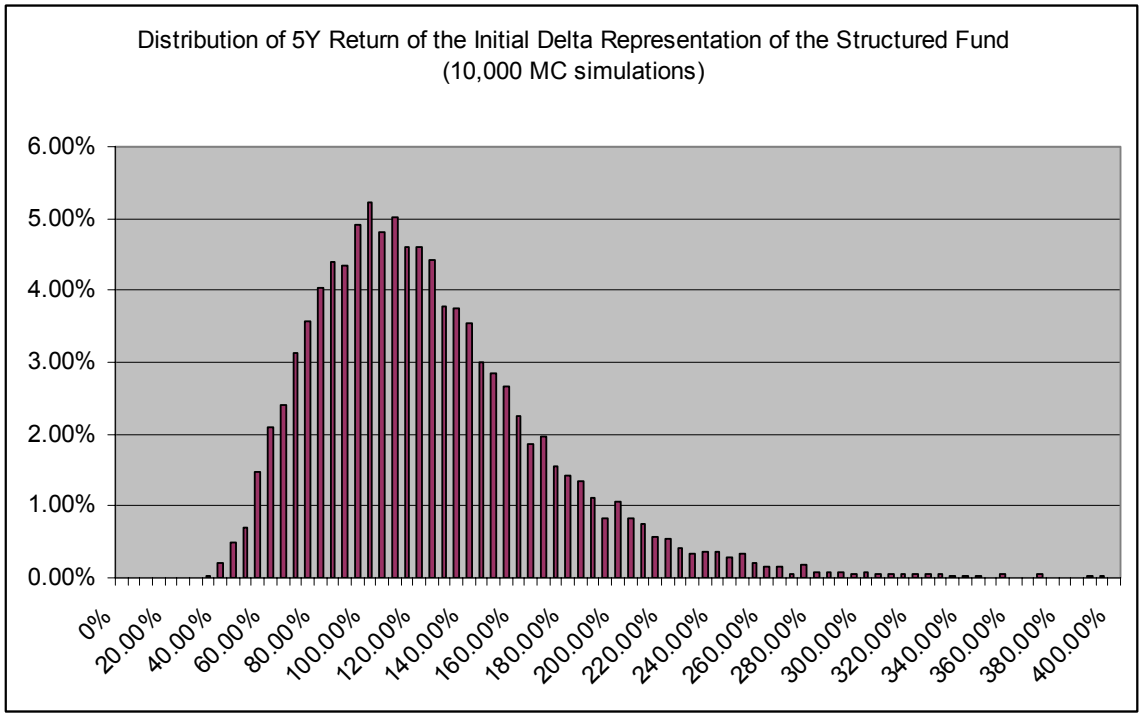
[2] « Le fonds (…) est construit dans la perspective d'un investissement pour la durée de vie du fonds (…) »

(i) equity fund tracking XYZ index



(ii) capital protected Structured Fund linked to XYZ index





It is important to point out that in this particular example the downside risk at maturity of the Structured Fund is much lower than on the delta representation at inception of the Structured Fund: the minimum payoff at maturity on the Structured Fund is 100% of the initial investment thanks to the capital protection, when the delta representation shows a much lower return.

Therefore if the volatility of the delta representation was to be used as a risk indicator, the level of risk perceived by the investor would be much higher that it actually is.

3.3 The proposed indicator is not adapted to many other categories of funds

The proposed indicator is somewhat acceptable only for monetary funds, funds invested in bonds in a constant proportion and funds invested in standard equities with a constant proportion, to the extent that such funds can be seen as providing a log-normal distribution of return.

For all the rest of the universe, the proposed indicator is not appropriate to evaluate the risks. It is not appropriate for Structured Funds, but also for most quantitative strategies and for any fund that use derivatives instruments or has a variable leverage.

It cannot take into account any degree of exposure to alternative strategies. As long as strategies use non linear instruments, like derivatives, it is a well-know fact that volatility is not adapted. For example, the EU Commission recommendation on derivatives[3] proposes only three methods to compute the risks. See recital 5: "*It is therefore necessary to recommend possible approaches of*

[3] Commission Recommendation 2004/383/EC of 27 April 2004 on the use of financial derivative instruments for undertakings for collective investment in transferable securities (UCITS) - http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004H0383R(01):EN:HTML

market risk measurement, by clarifying the conditions for the use of the following types of methodologies: the commitment approach; the Value-at-risk approach (VaR-approach) and stress tests". The recommendation would not propose the use of volatility, because volatility is not an appropriate measure of risks.

Many types of sophisticated funds would therefore be excluded by this indicator. Very simple funds – and this notion is not easy to define - may be covered by this approach, because we can assume that they have log-normal returns and that, therefore, volatility has some relation to the risk of loss.

3.4 The proposed indicator is also not adapted because it is a short term indicator, that does not take into account the holding period

The idea behind the use of volatility as a risk indicator, is that the risk of a fund can be determined at a given time independently from the investment horizon.

This is not right. One of the basic asset management rules is that the appropriate product depends on the horizon of the investment. Volatility is a very short indicator of risk. It may be appropriate for somebody that wishes to invest for only a week or a few months, but it is not appropriate for somebody that wishes to invest for a few years.

Indeed, in its February 2008 advice to the European Commission[4], CESR rightly mentions in point 5.31: "the investment horizon is one of the important features an investor and their adviser should be looking at".

What is important for an investor is his level of risk over a long term period. Investors need to know, through the risk indicator, whether they are likely or not to lose a significant part of their capital. This is what really matters to them.

It seems to us that the objective of this risk indicator is not to provide a short term view of risk that would allow investors to make quick speculative bets on a given fund. The objective seems to us rather to help investors have a clear view of the long term risks they would take if they invest their savings in such fund.

3.5 Recent market events have shown how misleading a short term indicator like volatility can be

Volatility is a poor and misleading indicator of risks. Volatility is nothing more than an indication of the short term "vibration" of the returns. It has nothing to do with actual risks of loss.

This has been very obvious during the crisis that we have seen: realized volatility at the beginning of 2007 was very low, and therefore using volatility as a risk measure would have made the public believe that equity funds were not very risky. However, they have made losses, only a few months later, that have reached on average more than 60%.

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[4] CESR's advice to the European Commission on the content and form of Key Information Document disclosures for UCITS. Ref. CESR/08-087 http://www.cesr-eu.org/index.php?page=contenu_groups&id=28&docmore=1#doc

This can be shown, for example, using the Eurostoxx 50 index, which is a benchmark used by many Euro-based equity funds.

The Eurostoxx 50 had a "peak-to-valley" loss of more than 60%. Between the peak of the market, 16 July 2007, and the valley, 9 March 2009, the index went from 4557.57 to 1809.98, which represents a loss of more than 60%. 1-year historical volatility was 17.9% on 16 July 2007, and that was quite low by historical standards. Such volatility was 30% on 11 May 2009 and has reached 44% in October 2008.

3.6 Value at Risk is a more appropriate indicator of risks

3.6.1 What is Value at Risk?

VaR is the usual quantitative tool to calculate the risk of loss over a certain period. Value at Risk (VaR) is a widely used measure of the risk of loss on a specific portfolio of financial assets. Indeed VaR is the method that is recommended by the European Commission for the management of derivatives risks in UCITS[5].

For a given portfolio, probability and time horizon, VaR is defined as a threshold value such that the probability that the mark-to-market loss on the portfolio over the given time horizon exceeds this value (assuming normal markets and no trading) is the given probability level.

For example, if a Fund has a 5 year 99% VaR of 20% , there is a 1% probability that the portfolio will fall in value by more than 20% over a 5 year period, assuming markets are normal, and the Fund keeps the same investment policy.

3.6.2 How to compute VaR for Structured Funds?

For Structured Fund with a fixed maturity, we recommend to compute the historical VaR at maturity of the fund using the back-tested data of the fund, by taking the 1% worst performances.

These calculations are very easy and could be put in place by any asset manager. Regulators' control would also be easy.

The conditions in which the back-tests are made could be left to level 3. Alternatively could be determined some guidelines at level 2. For example, we would ask for 5 years of simulations in order to compute the back-test.

3.6.3 How to compute VaR for "classical funds"

VaR is the most appropriate synthetic risk indicator. However, the main objection to its use as a synthetic indicator is its complexity. A lot of asset managers believe that it would be too cumbersome to always require the calculation of a VaR for all funds.

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[5] Commission Recommendation 2004/383/EC of 27 April 2004 on the use of financial derivative instruments for undertakings for collective investment in transferable securities (UCITS) - http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004H0383R(01):EN:HTML

We propose therefore, for funds that a simple structure, like equity funds or bond funds with a constant leverage, to calculate their VaR using their volatility. We would assume that these funds have a log-normal distribution and we would calculate their "Gaussian" 5-year VaR. This is easy to do because for such distribution VaR is proportional to volatility.

Computation would therefore not be more difficult than the computation of volatility.

3.6.4 A common scale for VaR and volatility

We would use the log-normal distribution to give equivalent positions on the scale to:

- volatility for "classical funds";
- VaR for other funds.

In order to help regulators and asset managers, CESR would simply publish the following table, which could be updated from time to time by CESR, taking into account last market data like interest rates.

Level of risk	VaR	Equivalent volatility for simple funds
Level 1	0 (capital guarantee)	0%
Level 2	0 < VaR < 10%	… < Vol < …
Level 3	10% < VaR < 20%	… < Vol < …
Level 4	20% < VaR < 30%	… < Vol < …
Level 5	30% < VaR < 40%	… < Vol < …
Level 6	40% < VaR < 50%	… < Vol < …
Level 7	60% < VaR	… < Vol

The asset managers would therefore be able to compute easily their appropriate level of risks.

3.7 Answer to Question 7: Does the methodology cover all UCITS types? More specifically, do you agree with the proposed approach of distinguishing between market funds, strategy funds, and structured funds (including guaranteed funds) and the adaptation of the calculation methodology to each of these fund types?

See paragraphs 3.1 to 3.6 above. The proposed methodology fails to cover all UCITS types. Indeed it is clearly inappropriate for any type of fund which cannot be considered as having a log-

normal distribution of returns: Structured Funds, many quantitative funds, alternative investment funds of funds etc.

Risk involved in Structured Funds cannot be measured by volatility, which is a short term indicator. It fails to grasp the long term risks involved in Structured Funds.

Also adopting a delta representation has 2 major drawbacks:

- it fails to grasp the diversification of risk profile involved in Structured Funds (even 2 Structured Funds can have the same delta representation at inception with significantly different risk profiles at maturity)

- the delta representation is model dependant: it depends importantly on the parameters (volatility, implied dividend yield) used by the issuer to compute the delta of the Structured Fund. Therefore the delta representation cannot be deemed to be an "objective" way of representing a Structured Fund.

We believe that Value-at-Risk (VaR), based, as regards Structured Funds, on historical simulations is a more relevant indicator than volatility.

We propose an alternative methodology, based on VaR, which would include all types of funds and therefore level the playing field and make investors really aware of their risks of losses. As shown above, me make it easy for "classical" funds by using a table to convert volatility into VaR.

3.8 Answer to Question 8: As regards to the use of a 'risk add-on' and an exclamation mark(!) in situations as presented in the above section, what are the merits and limits of each solution? Can you suggest another option to tackle the described situation?

We believe that VaR is a measure that is applicable to every type of funds; hence we do not recommend the use of exclamation mark (that would be perceived very negatively by the end investors) nor the use of a risk add-on.

The recent twist and turns of the equity market plead rather in favor of a VaR measure of risk rather than a volatility approach. Realized volatility at the beginning of 2007 was at an all-time low, and therefore using volatility as a risk measure would have proved a very poor indicator in the light of the recent crisis, where a typical equity fund has lost more than 60%.

3.9 Answer to Question 9: Are the proposed solutions (systematic classification into category 7, use of a 'risk add-on' or a modifier) to tackle situations of a potentially changing risk profile appropriate and commensurate? What are the merits and limits of each option?

For Structured Funds, the historical VaR measure allows to capture the situation of changing risk profile since it is a measure of risk over an horizon, which is the maturity of the funds.

The systematic classification into category 7 or risk add-on are therefore not needed anymore. A systematic classification of Structured Funds into category 7 would hurt the level playing field, by

making Structured Funds appear risky, whereas in fact many of them are not very risky because they are capital-guaranteed.

Indeed it would be ironic to have, for example, an equity fund indexed on the Eurostoxx 50, classified in category 2 or 3, for example, and the same fund indexed on the Eurostoxx 50, but supplemented by a capital guarantee, be classified in category 7. That would be very difficult to understand for investors.

3.10 Answer to Question 11: Do you foresee any other situations where the methodology may not be expected to capture appropriately the risk profile of the fund? If so, what solution should be considered?

No. As explained, VaR is the only correct risk measure for Structured Fund able to capture the long term risk, and general asymmetry of the corresponding returns.

4 Presenting the potential performances of Structured Funds

The consultation paper details 3 options concerning the presentation of potential performances of Structured Funds:

- Option A (chapter 2.2.1. points 49 to 52, page 39) consists in the publication of back testing results;
- Option B (chapter 2.2.2. points 53 to 62, page 39) consists in the publication of prospective scenarios;
- Option C (chapter 2.2.3. points 63 to 79, page 40) consists in the publication of prospective scenarios based on probability tables.

We will present hereafter our opinion on Option A and Option C, since we agree with CESR that scenarios are more appropriate in the prospectus itself than in the KID. However, the KID could refer to them on a web site, for example.

5 Option A: publication of back test results

5.1 The purpose of historic simulations

Historic simulations, also named “back-testings”, are very natural for Structured Funds.

The return of a Structured Funds at maturity is related to the price of some underlying securities. Anybody who is able to use an Excel spreadsheet is thus able to calculate what would have been the return of such product if it had been issued 5 years ago, 6 years ago, 7 years ago etc.

These calculated returns provide investors with some insights on performance potential of Structured Funds. These performances are especially useful when they are compared to the

performance of the underlying. For example, the performance of a Structured Funds based on a basket of shares will be compared with the performance of the basket of shares itself.

Such data give investors a better understanding of the structure and the mechanism involved. They also give investors an idea of the returns they can expect, to the extent that the market conditions of the past are an indication of the market conditions of the future. This is the obvious limitation of back-testings, but the same can be said for any market or strategy fund track record. Market conditions of the future are unlikely to replicate those of the past: markets may move differently and stochastic parameters (volatility of markets for example) may also be different.

In spite of such limitations, back-tests are extremely valuable, because they allow simulating a product on actual market returns. Even if these market returns belong to the past, this is a more objective approach than to simulate them on purely arbitrary scenarios. If the period of back-testing is sufficiently important, it allows the investor to see the behavior of the product in different market environments, such as boom and bust cycles (for example 1998-2000 or the 2004-2008 phase).

Indeed, professional investors are used to back-tests. Any type of strategy that is supposed to bring profits in the future must first be tested on the past. For example, hedge fund managers routinely back test their prospective arbitrage strategies.

Another advantage of back-tests is that they help the end investors understanding the actual behavior of the product in real market conditions.

We believe that such advantages should be taken into account.

5.2 Back-test are already allowed by the MIF level 2 Directive

Article 27 (5) of MIF level 2 Directive[6] allows “historic simulations”, i.e. back-tests, provided they follow a certain number of rules that aim to protect investors. For the sake of harmonization and level playing field, it would not make sense to allow them in any marketing document relating to any type of product, and then prohibit them in the KID.

5.3 Back-tests can be made easy to read

One of the two arguments against back-tests that are in the consultation document is that: “*out of the 3 formats tested, back-testing was misunderstood more than the other variants. There is a risk that investors might misunderstand the examples given and interpret past figures as future performance*.”

Any type of data presented to investors may be misinterpreted. Past performances could also be misinterpreted, and clearly probability scenarios, as we will discuss later.

[6] COMMISSION DIRECTIVE 2006/73/EC of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards organisational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive

We believe that back-test can be presented in a very straightforward and readable way. We propose to adopt the same format as the one that is presented for probabilities at point 66, page 41. Indeed back-tests provide a set of probabilities that are superior to the "risk neutral" probabilities presented as Option C, because they are based on actual market situations that have really happened in the past, not on arbitrary stochastic simulations, like in Option C.

An example of the format that we propose is the following:

Simulated Return of the Fund on the last 10 years

EVENTS	**PROBABILITY** Based on the last 10 years markets
The performance of the Fund is negative	10%
The performance of the fund is positive but lower than the return from an investment in risk free assets over the same time horizon of the fund	20%
The performance of the fund is positive and in line with the return from an investment in risk free assets over the same time horizon of the fund	40%
The performance of the fund is positive and higher than the return from an investment in risk free assets over the same time horizon of the fund	30%

In order to compute this table, the performances of the Structured Fund would be calculated if the Fund had been launched every day or week during 10 years, the first day being such that the Fund would have matured 10 years earlier from now, and the last day being such that the Fund would have matured yesterday. This gives a distribution of performances based on real market situations during 10 years that can be presented in the form of a probability table. Such table is easy to understand and such information is extremely valuable to investors.

5.4 Gaming

The second argument of the consultation against back-tests is the "gaming" argument: "*Furthermore, CESR had noted the risk that a presentation using back-testing might easily be 'gamed' by tailoring the fund formula in order to present flattering data*".

Tailoring the fund formula in order to provide good back-test is not "gaming", but another name for arbitrage.

Markets present all sorts of imperfections, also known as "arbitrage opportunities", and using these imperfections in order to generate a profit is an important asset management technique. When structurers design strategies that show resilient back-tests, they are doing what asset managers or arbitrageurs are doing: finding strategies that would have generated steady returns in the past and that they expect will provide similar return in the future.

For some structures, there may be some issues of stability and robustness of back-tests that may justify some regulatory guidelines. We are not sure that such issues are significant enough to require regulation but we would, however, be more than happy to work with CESR on this.

5.5 Answer to question 45: Do you agree with the approach proposed by CESR as regards back-testing?

No we do not. See our paragraphs 5.1 to 5.4. :

- we show that back-tests can be presented in a simple and readable way, in the form of probabilities;

- the fact that Structured Funds can be tailored in order to provide good back-tests does not mean necessarily that they are gamed. Markets present all sorts of imperfections, also known as “arbitrage opportunities”, and using these imperfections in order to generate a profit is an important asset management technique. When structurers design strategies that show resilient back-tests, they are doing what asset managers or arbitrageurs are doing: finding strategies that would have generated steady returns in the past and that they expect will provide similar return in the future.

Back-test are, for Structured Funds, the equivalent of track records for actively managed funds. The approach proposed by CESR would therefore not create a level playing field between all funds.

5.6 Answer to question 46: Are you aware of any other merits that might support further consideration of this option?

Yes we are. See our explanations in our paragraph 5.1 to 5.4.

- Back-tests are the basic tool used by the most sophisticated part of the asset management industry. Retail investors should also be allowed to obtain such information.

- Back-tests are objective: they are based on real market data of the past, not on models.

6 Option C: publication of prospective scenarios based on probability tables

6.1 Option C 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.

This is a very classical paradox in option pricing theory. See for example John Hull[7], 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.

6.2 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

[7] John C. Hull: Options, Futures and other Derivatives, Prentice Hall, fifth edition

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.

6.3 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 that is presented on point 66, page 41 of the consultation document, should be also included in the KID of any Fund, even when this is not a Structured Fund.

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

The problem for real probabilities is their evaluation.

There are only two ways to evaluate real probabilities:

Risk Premium

Theoretically, probabilities can be inferred from risk premium. For example, we can infer from equity risk premium the real probabilities that are priced by the market for equities.

The problem is that there is no consensus on how to calculate them.

Historical Probabilities

Using historical probabilities is the only objective way of calculating real probabilities. We therefore go back to Option A, since back-tests are the appropriate way to compute probabilities based on historical performances.

6.5 Answer to question 54: Are the methodological requirements which underpin probability tables sufficient, clear and appropriate?

As shown before (see our paragraphs 6.1 to 6.4), they are not appropriate. They rely on a risk-neutral world that does not exist. They mis-price the risks.

6.6 Answer to question 55: Would such an approach cover all types of fund for which neither past performance nor a proxy can be used?

If such an approach is kept, showing risk-neutral probabilities, this approach should be extended to cover all funds, not only Structured Funds, for the sake of investors' information and for the sake of the level playing field between different types of products.

6.7 Answer to question 56: Is this approach easy for UCITS providers to implement?

No, that would not be easy, because regulators 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.

6.8 Answer to question 57: Should any other issues be taken into account as regards the use of probability tables?

The level playing field between different sorts of funds. If such methodology were to be used for Structured Funds, there is no reason not to use it also for other types of funds.