MOVEMENT FOR RISK TRANSPARENCY

Response to the Consultation by EBA, EIOPA and ESMA on the Discussion Paper (JC/DP/2015/01) on "Risk, Performance Scenarios and Cost Disclosures in Key Information Documents for Packaged Retail and Insurance-based Investment Products".

We are a group of academics, consumers associations, unions and other representatives of investors' interests who want to express a common view about the issues regarding Packaged Retail and Insurance- based Investment Products that have been raised in the JC/DP/2015/01 consultation paper. We want to remember that on December 4th 2010 and January 31th 2011 we sent two different letters to the European Commission and to ESMA in response to two public consultations on "the selection and presentation of performance scenarios in the Key Investor Information document (KIID) for structured UCITS" and on "the legislative steps for the Packaged Retail Investment Products initiative", expressing in both contributions our shared position about the use of the scenario analysis/valuation matrix (also known as "what-if" analysis) approach to implement the performance scenarios in the KIID for structured UCITs and PRIPs. Also, on 17th June 2013 we submitted a public response to the IOSCO consultation on Retail Structured Products (CR05/13), highlighting our strong preference for the use of probability scenarios as a tool to properly inform the retail investor about the risks of the product. Eventually, on 16th February 2015 we reaffirmed strongly our point of view by responding to the public consultation JC/DP/2014/02 on the Key Information Document for PRIIPs. In all these letters we highlighted the inadequacy of the scenario analysis/valuation matrix as transparency tool, since it provides a partial representation of the potential returns of a structured product. We also pointed out that the natural use of the scenario analysis/valuation matrix is inside advertising pamphlets, while its unavoidable arbitrariness makes it of little use in a document (like the KIID for UCITs and the now imminent KIID for PRIIPs), especially if the final aim of the document is to provide "sufficient information for the average retail investor to make an informed investment decision", (as previously stated in the Consultative Document on PRIPs published by the European Commission on November 26th 2010). With the present public response, we want to confirm again our reasoned opinion about the usefulness and validity of probability scenarios by responding concretely to the majority of the questions arisen in the discussion paper.

QUESTION 1 (§ 2.2.2 CHOICE OF MODEL, CHOICE OF PARAMETERS)

Please state your preference on the general approach how a distribution of returns should be established for the risk indicator and performance scenarios´ purposes. Include your considerations and caveats.

The value of any PRIIP can be represented, over the period comprised by its time horizon, by a specific stochastic process denoted by $\{S_t\}_{t\in[0,T]}$. For $t=T$, the final value of the product (i.e. S_T), is a random variable whose risk-neutral density is the raw data to be analyzed in order to build both the risk indicator and the performance scenarios. The adoption of the risk-neutral measure $\mathbb{Q}$ represents the basic methodological requirement on order to ensure that information conveyed by the risk indicator and the performance scenarios is objective, meaningful and also consistent both intrinsically (i.e. across the various indicators it encloses) and with respect to the message provided. It's only under the measure that any arbitrary assumption on the future evolution of the market variables is discarded, allowing an effective comparability across the fair prices of different PRIIPs and across their potential performances and the associated variability. This comes directly from the fact that the risk-neutral measure is the only one consistent with the no-arbitrage principle, which, in fact, provides the connection between the fair value of any contingent claim with a time horizon T and the risk-neutral probability density function of the possible final values of the contingent claim at time T. This is also the reason why market practitioners make use, in their business, of pricing and hedging models defined under the stated measure. Sometimes, especially for elementary and short-term PRIIPs, the risk-neutral density of S_T has a closed form, but in general terms it can always determined through Monte Carlo simulation techniques[1].

QUESTION 2 (§ 2.2.2 CHOICE OF MODEL, CHOICE OF PARAMETERS)

How should the regulatory technical standards define a model and the method of choosing the model parameters for the purposes of calculating a risk measure and determining performance under a variety of scenarios? What should be the criteria used to specify the model? Should the model be prescribed or left to the discretion of the manufacturer? What should be the criteria used to specify the parameters? Should the parameters be left to the discretion of the manufacturer, specified to be in accordance with historical or current market values or set by a supervisory authority?

Most of the stochastic models used to describe the above processes (see QUESTION 1) can be chosen by the manufacturer for the purposes of calculating a risk measure and determining performance. The majority of them is defined in continuous time and then suitably discretised to perform the necessary simulations. The preference for continuous-time models stems from their greater flexibility (also in computational terms), since, also in the case of quite complex PRIIPs whose pay-offs depend on specific quantitative algorithms and are exposed to a multiplicity of risk factors, they allow a description of the dynamics of the variables of interest and the ways in which they affect the value of the PRIIP over time. With regards to the time step of the simulation, it should be reasonably short and close to the common continuous-time modeling assumptions. Weekly or daily discretisation grids are fine.

From a technical point of view, the adoption of the risk-neutral probability measure is obtained by properly inserting the simulated trajectories of the short risk-free rate into the dynamics of the process $\{S_t\}_{t\in[0,T]}$, in either a direct or indirect way, depending on the characteristic of the PRIIP. For instance, where the value of the PRIIP depends, among other things, on the behavior of a share of an equity index, the trajectories of these underlying assets must be built, as is well known, by inserting into their drift component, at any step of the simulation, the value of the short risk-free rate obtained corresponding to the same time step.

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[1] Glasserman P., 2004, "Monte Carlo Methods in Financial Engineering" (Springer).

Among the simplest PRIIPs, some are typically easy to model, as they usually exhibit a direct dependence on the portfolio of the underlying assets; they can be accurately represented by means of common stochastic differential equations, such as Geometric Brownian Motion, possibly slightly revised to reflect features connected to the management style adopted or (if necessary) to the stochastic term structure of the benchmark's volatility. Other PRIIPs, on the other hands, are in all respects, contingent claims, that is, PRIIPs whose payoffs structures work over a specific time horizon and are linked (often in a non-linear way) to underlying assets or reference values, according to specific formulas and subject to the fulfillment of precise conditions. This implies that stochastic models used to describe the possible patterns of the PRIIPs over time must carefully consider all relevant risk factors and the particularly way in which, depending in financial engineering choices, these factors can affect the future cash flows of the investment until the expiry of its time horizon. Parameters and variable associated with different risk factors have to be properly calibrated by the manufacturer through estimates based on current market data and by taking care of their consistency with the features of any single PRIIP and with the reality of the reference market.

Clearly, since most PRIIPs have a time horizon longer than one year, variables like interest rates, credit spreads, volatilities and correlations cannot be assumed to be constant; models used to perform simulations must therefore include a suitable set of stochastic differential equations in order to cope with this element of complexity. The same requirements are used in the models developed by market practitioners to obtain the most accurate assessments of the value of any PRIIP which they want to sell or include in their proprietary portfolios.

Risk-neutral simulations must also consider the size and the time schedule of periodic or one-off amounts paid to the investor or invested in other financial assets during the implicit time horizon of the PRIIP; simulations must also suitably deal with PRIIPs including path-dependent features which can trigger an early redemption (like callable or puttable bonds, American or Bermudan options[2]), the coupon size or existence or the switch to another pay-off structure (e.g. flipping the coupons from fixed to floating or vice versa).

QUESTION 3 (§ 2.2.3 TIME VALUE OF MONEY – WHAT REPRESENTS A LOSS FOR THE RETAIL INVESTOR?)

Please state your view on what benchmark should be used and why. Are there specific products or underlying investments for which a specific growth rate would be more or less applicable?

We believe, that in the methodological environment described in the answers of QUESTION 1 AND QUESTION 2, the most correct choice is *b. The amount invested grown at the risk-free growth rate*.

In fact, in this context the most reasonable choice is to identify the macro-events according to criteria able to immediately disclose the performance risks of a PRIIP, defined as its ability to create added value for the investor with respect to the initial outlay per se and also to the results achievable by taking an alternative investment decision. Hence, it is necessary to look for an alternative investment which minimizes any arbitrary assumption on investor's preferences and, at the same time, is able to represent in a clear, immediate and significant way how the specific risk factors and financial structure of the PRIIP will affect the payoffs that can be obtained. From this perspective, the simplest choice is to compare the risk-neutral density of the product with the density associated with the investment of the same amount of money in the risk-free asset. The latter is intended as an investment which, over the same time horizon of the PRIIP and given an initial outlay equal to the issue price (i.e. 100), pays a return equal to that accrued at the risk-free rate of the currency are where the PRIIP is sold. In finance this process is also called risk-neutral numéraire and it is modeled through the stochastic process $\{B_t\}_{t\in[0,T]}$ which is governed by the equation $B_T := \exp\left(\int_0^T r_s ds\right)$, which reveals that the unique source of uncertainty for the risk-free asset are the movement in the interest rate curve. Hence, the risk-neutral density of the final values of an initial investment of 100 in the risk-free asset reproduces exactly the impact of interest rate volatility on the returns of a financial investment, ensuring that the comparison with the PRIIP highlights the influence of the specific features that characterize such a PRIIP.

QUESTION 4 (§ 2.2.3 TIME VALUE OF MONEY – WHAT REPRESENTS A LOSS FOR THE RETAIL INVESTOR?)

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[2] Hull J., 2011 "Options, Futures and Other Derivatives", 8th Edition (Englewood Cliffs, NJ:Prentice Hall).

What would be the most reasonable approach to specify the growth rates? Would any of these approaches not work for a specific type of product or underlying investment?

We believe, that in the methodological environment described in the answers of QUESTION 1 QUESTION 2 and QUESTION 3, the most correct choice is *a. The asset grows at the risk free rate (with the hypothesis that the risk-premium is equal to zero).*

In fact, from a technical point of view, the adoption of the risk-neutral measure implies a risk premium equal to zero. The final risk-neutral probability distribution is therefore obtained by properly inserting the simulated trajectories of the short risk-free rate into the dynamics of the process $\left\{ S_t \right\}_{t \in [0,T]}$, in either a direct or indirect way, depending on the characteristics of the PRIIP. For instance, where the value of the PRIIP depends, among other things, on the behavior of a share or an equity index, the trajectories of these underlying assets must be built, as is well known, by inserting into their drift component, at any step of the simulation, the value of the short risk-free rate obtained corresponding to the same time step.

QUESTION 5 (§ 2.2.4 TIMEFRAME OF THE RISK AND REWARD INFORMATION)

Please state your view on what time frame or frames should the Risk Indicator and Performance Scenarios be based.

Our position on the subject is coherent more with option *c. Show the risk indicator for the recommended holding period, but include a warning or narrative text that explains the possible variation in risk over time.* Nevertheless, additional performance scenarios may be considered suitable for PRIIPs with path-dependent features which can trigger an early redemption (like callable or puttable bonds, American or Bermudan options), the coupon size or existence or the switch to another pay-off structure (e.g. flipping the coupons from fixed to floating or vice versa).

QUESTION 6 (§ 2.3.1.2 CREDIT RISK)

Do you have any views on these considerations on the assessment of credit risk, and in particular regarding the use of credit ratings?

Our view on the delicate issue of the assessment of credit risk is oriented towards the use of *credit spreads* inferred from quoted CDS or liquid bonds of the PRIIP's manufacturer, where the market is active and liquid. It is obvious that, in absence of reliable information about credit spreads, second best methodologies should come into play, such as the use of *credit ratings* of the issuer or of a comparable obligor, where available .

Anyway, we want to remark that the information to be embedded in the implied probability distribution via CDS or bonds spreads has the indisputable advantage of being always updated and reactive to the variable market conditions, having considered moreover its direct connection with the quoted prices of liquid assets. When the market volatility is high, this technical properties is of fundamental importance in the perspective of the investor protection, especially with respect to other metrics that are based on historical data or economic and accounting information, e.g. the rating estimated for the evaluation of the credit risk of the issuers of PRIIPs.

QUESTION 7 (§ 2.3.1.3 LIQUIDITY RISK)

Do you agree that liquidity issues should be reflected in the risk section, in addition to clarifications provided in other section of the KID?

We agree in full with the proposed KID scheme on liquidity risk.

QUESTION 8 (§ 2.3.1.3 LIQUIDITY RISK)

Do you consider that qualitative measures such as the ones proposed are appropriate or that they need to be supplemented with some quantitative measure to some extent? Should cost and exit penalties for early redemptions be considered a component of the liquidity risk and hence, be used to define a product as liquid or not for the KID purpose?

We believe that quantitative information is inherently more objective and less manipulable and therefore it should be exploited to the possible maximum extent. In this perspective, we advise the use of quantitative indicators like the bid-offer spreads, where a secondary market is active. However, we acknowledge that here are many situations where such information is not available or is not sufficiently reliable to be incorporated in the KID; only in these cases qualitative information should be supplemented, with clear warnings about the unavailability of more objective measures of liquidity risks.

For what regards the debate regarding the influence of costs and early redemptions penalties, we are keen to sustain that a PRIIP burdened by high exit penalties is inherently less liquid and that this feature should be reflected in the definition of an appropriate liquidity risk indicator.

QUESTION 9 (§ 2.3.3.1 INTEGRATING RISKS)

Please state Your views on the most appropriate criteria and risk levels' definition in case this approach was selected.

We don't think that the implementation of Option 1 could be feasible and improve the standard of information conveyed to the investor without the development of an objective quantitative measure of risk that integrates market and credit risk. This approach is characterized by over-reliance on qualitative measure. However, in the logic of offering a contribution also on topics we do not fully support, we consider a 6-levels scale for risks richer and theoretically more able to capture the inherent riskiness of different PRIIPs. The level of loss should be calculated with the aid of the most reliable quantitative measures (preferably volatility-based).

QUESTION 10 (§ 2.3.3.1 INTEGRATING RISKS)

Please state Your views on the required parameters and possible amendments to this indicator.

We clearly dismiss Option 2 since it appears a theoretical construction not supported by literature and empirical tests. Instead, in this context it's interesting to recognize how reliable and economic is the information connected with the full evaluation approach, since these data have been already calculated, verified and stored by the manufacturer for reasons of hedging and risk management. The benefits of exploiting this set of information in the perspective of the construction of a robust and integrated risk indicator is invaluable. More considerations on these topics are developed in the following questions.

QUESTION 11 (§ 2.3.3.1 INTEGRATING RISKS)

Please state Your views on the appropriate details to regulate this approach, should it be selected.

Our position, as expressed in the answers of QUESTION 1, QUESTION 2, QUESTION 3 AND 4, is clearly in favor of the use of forward looking simulation models, for reasons of consistency, robustness and coherency. We believe that the manufacturer has to employ the same models he uses for hedging and risk management operations in his day-to-day activities, on whose he has full control. The regulator should only supervise the process of information production, by giving guidelines and principles and controlling the quality of the information produced. By exploiting the existent and reliable internal models of the manufacturer, a final probability distribution of the potential returns is obtained, that fully incorporates all the PRIIPs relevant risk components. In this perspective, we support the *integration of credit risk via the incorporation of default scenarios into the distribution of returns*.

After having obtained the distribution of returns, we acknowledge that different measure can be consistently calculated: VaR, ES, volatility of the forward looking returns. Among these, we slightly prefer a volatility-based indicator, that appears simple and more manageable, especially if complemented with the additional information of probability scenarios (see QUESTION 15, 16, 17 AND 18).

QUESTION 12 (§ 2.3.3.1 INTEGRATING RISKS)

Please state Your views on the general principles of this approach, should it be selected. How would You like to see the risk measure and parameters, and why?

An informed evaluation about the variation proposed here cannot be released, since the methodology described is incomplete and rather obscure.

In principle, we continue to support a forward-looking approach that exploits the internal models of the manufacturer, under a general framework where the regulator gives some general technical guidelines of reference (i.e. for instance in our proposal, the adoption of a zero risk-premium and some technical standards in the Monte Carlo simulations). The models parameters must be consistent with the value of the PRIIP estimated by the manufacturer in order to ensure internal coherence, and not superimposed by the regulator; in fact we firmly believe that significant discrepancies in the evaluation process of PRIIPs between different manufacturer with proprietary models can be avoided or reduced at minimum, via a proper regulatory oversight and an inevitable market pressure towards the convergence of results.

We support the *integration of credit risks into the simulation via a Poisson distribution considering the default risk of a PRIIP*.

QUESTION 13 (§ 2.3.3.1 INTEGRATING RISKS)

Please state Your views on the potential use of a two-level indicator. What kind of differentiators should be set both for the first level and the second level of such an indicator?

We are keen to dismiss the "two-level" indicator proposal for the inherent difficulty of implementation explained in the consultation paper.

QUESTION 14 (§ 2.3.3.2 SCALE OF THE RISK INDICATOR)

Do You have suggestions or concrete proposals on which risk scale to use and where or how the cut-off points should be determined?

Our reference table to define the scale of the risk indicator is the one tested by CONSOB, the Italy's Securities and Exchange Commission. In fact since a few years CONSOB has adopted a risk-based approach to transparency for insurance products as Index and Unit linked, which implements consistently a forward-looking probability approach[3]. The methodology provides a qualitative scale of risk composed by 6 sub-classes; the PRIIP is classified inside each class by calculating a volatility-based indicator, fully consistent with the rest of the information provided.

The cut-off points were determinate periodically on the basis of a complex methodology that makes extensive use of GARCH diffusive models (see note 1). An example of application of this risk scale has been provided in the answer to the consultation paper JC/DP/2014/02.

QUESTION 15 (§ 2.4.3 ASSESSMENT OF DIFFERENT APPROACHES)

Please express Your view on the assessment described above and the relative relevance of the different criteria that may be considered.

As properly expressed in other public consultations (see for instance JC/DP/2014/02) , we strongly believe that a performance scenarios can only be stated in terms of probability: transparency has to do with helping retailers to make clear the probability of success of their investments, while a what-if analysis provides a representation of a single state of the world out of an infinity of other possible ones, and as such has zero probability; collecting all scenarios and distinguishing among good, bad and fair necessarily leads to a probability approach.

We reaffirm that comparison of different products can only be done in terms of probability: in a scenario disclosure, every product is evaluated (and not measured) in a different setting and cannot be compared across different asset classes and products unless all possible scenarios are collected (and measured) in a probability table.

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[3] Technical details about this approach, that address the majority of the questions regarding the implementation of performance scenario via probability, can be found in Minenna M. (2011) "A Quantitative Framework to Assess the Risk-Reward Profile of Non-Equity Products", Risk Books.

Hence we confirm again our view that performance information should not be offered through the what-if approach (even if prescribed). As clearly stated in the consultation document, out of an infinity of possible results of the investment, this approach considers three elementary outcomes, selected at the convenience of the issuer. As witnessed by several studies and by tests on large samples of individuals, this representation fosters biased beliefs, since the three elementary scenarios are perceived as exhaustive of all performances achievable by a product and they are also considered as having the same 33% probability of occurring.

We think that the probabilistic approach is a much better alternative to concretely support investors, as it encompasses the entire probability distribution of the product's final performances and summarizes it in a set of events – calculated on a time frame that is specific for each product and corresponds to the recommended holding period – of significant importance for any investor: for example experiencing a loss (negative return), or getting back the amount invested plus a return below, above or in line with the risk-free.

For what regards the costs, we believe that, given the in-house availability of the mentioned models, issuers can provide consumers with this key information without any additional burden with respect to their usual pricing and risk management activities. Eventually, the reference to the risk-neutral measure used to calculate the fair price of the product should ensure also consistency and comparability across firms and products.

We agree with the need to supplement the probability scenarios with a proper narrative; disclaimer and warning have to be put in place in order to avoid the wrong interpretation of the probabilities. This is especially true when the longer maturity of the PRIIP or the calculated results (i.e. a negative scenario with 0% probability) make difficult to correctly read the probabilities.

QUESTION 16 (§ 2.4.4.1 DEFINITION AND NUMBER OF SCENARIOS)

Do You think that these principles are sufficient to avoid the risks of manufacturers presenting a non-realistic performance picture of the product? Do You think that they should be reinforced?

We believe that what-if scenarios are very prone to be manipulated in order to magnify the investor's expectations about a PRIIP's performances. In the standard approach, where the manufacturer can choose freely the scenarios to be represented, an intended distortion of the results is straightforward. The imposition of more strict rules can improve the comparability, but not in a decisive way.

QUESTION 17 (§ 2.4.4.1 DEFINITION AND NUMBER OF SCENARIOS)

Do You think the options presented would represent appropriate performance scenarios? What other standardised scenarios may be fixed?

Our idea is that historical information about the past performances of a PRIIP should carefully be avoided, since it clearly can be misleading for the investor; past information can anyway be recovered inside a standardized synthetic risk indicator, based on returns' volatility.

The proposal to set prescriptive scenario and growth rates seem very difficult to implement, while the benefits in terms of reasonability and greater comparability appear to us at most dim.

QUESTION 18 (§ 2.4.4.1 DEFINITION AND NUMBER OF SCENARIOS)

Which percentiles do You think should be set?

A fixed partition of the probability distribution of returns as the one proposed in the consultation paper (i.e. 10%, 50%, 90%) has the undoubted advantage to be objective and simple to obtain.

Nevertheless, we want to highlight that other solutions, only marginally more complex, may show important benefits, as the immediate adaptivity to continuously changing markets conditions. Our reference methodology is the one tested by CONSOB, the Italy's Securities

and Exchange Commission. In fact since a few years Consob has adopted a risk-based approach to transparency for insurance products as Index and Unit linked, which implements consistently a forward-looking probability approach[4].

In the Consob approach the percentiles are variable and determined by exploiting the information contained in the risk-neutral numéraire probability distribution (see answer to Question 3). To conduct the partition of the probability distributions of the returns, the safest financial investment (i.e. the risk-neutral numéraire, rfa $\left\{B_t\right\}_{t\in[0,T]}$) – that at the present date in Europe can be identified in the Overnight Index Swap term structure (OIS) – is adopted. It allows to identify three to four main performance scenarios (negative return and positive return respectively below, in line and above the rfa) each one identified by the associated probability and by a value (i.e. the conditional expected return of each partition) which synthesizes the returns achievable in that scenario. The methodology is also known as the *superimposition technique*[5].

From a technical point of view, since both the probability density of the returns and that of a PRIIP are calculated under the risk-neutral measure $\mathbb{Q}$, it is legitimate to compare their final value and to properly define events to be quantified using this measure. The probability density of the risk-neutral numéraire at time *T* inherently associates a predetermined quantile of probability with a final value of this asset; in the search of a coherent set of reference thresholds, it is then possible to connect two values of α_1 and α_2 with the events "the final value of the *rfa* is lower than α_j" (for $j=1,2$), in terms of probability quantiles on the final distribution of the numéraire. This is formally stated as follows: $\mathbb{Q}\left[100B_T \le \alpha_j\right] = P_j$ for $j=1,2$, where *T* denotes the investment time horizon of the PRIIP. The choice of specific quantiles P_j for $j=1,2$ on the density of the *rfa* to characterise the reference thresholds of the PRIIP's probability density implicitly assumes a "cut" of a fixed percentage of the trajectories of the process of the *rfa* that are inevitably considered as not representative of the potential behaviour of the process itself at time *T*. Hence, the cutting procedure can be considered as a sort of correction aimed at excluding extreme events from the risk-neutral distribution of the risk-neutral numéraire and, to this end, the choice of the thresholds α_1 and α_2 must be related respectively to very low and very high quantiles. Moreover, in a broader sense, it is self-evident that if the original distribution of the risk-neutral numéraire is defined in an open interval like $[0,\infty[$, cuts on given quantiles are mandatory in order to effectively implement a criterion connected with the density of the *rfa*. In the Consob implementation, the values of α_1 and α_2 are set respectively to be the 2.5% and 97.5$ percentiles. In formal terms this means that:

$$\mathbb{Q}\left[100B_T \le \alpha_1\right] = 2.5\%, \quad \mathbb{Q}\left[100B_T \le \alpha_2\right] = 97.5\% \cdot$$

It's interesting to observe that, by using this identification criterion, the reference thresholds are automatically anchored to variations in the positions and the dispersion of the density of the risk-neutral numéraire, and consequently these thresholds objectively reflect changes in the volatility of the interest rates and in the overall market conditions.

Anyway, the proposed idea of fixed percentiles can be considered a second-best option in conveying the necessary information to the investors by the means of a table.

QUESTION 19 (§ 2.4.4.1 DEFINITION AND NUMBER OF SCENARIOS)

Do You have any views on possible combinations?

We think that option *c) Probability approach (three scenarios) + an insurance event* is the best option. In fact, the baseline partition in three events (negative, neutral, positive) can be always supplemented by an additional sub-partition where the PRIIP's financial structure requires it. This flexibility is one of the main advantages of the adoption of a probabilistic approach.

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[4] See note 3.

[5] See note 3.

QUESTION 20 (§ 2.4.4.2 OTHER METHODOLOGICAL ISSUES TO CALCULATE PERFORMANCE IN EACH SCENARIO)

Do You think that credit events should be considered in the performance scenarios?

In coherence with what we stated in answers to QUESTION 11 and QUESTION 12, our view comprehend the inclusion of credit events in the probabilistic performance scenarios. Obviously, these occurrences of default have to be represented in the negative scenario; it's worth noticing that the proposed partition of the distribution of the returns by using fixed percentiles not necessarily assures it. Conversely, in the probabilistic approach described in the answer to QUESTION 19 not only the credit risk is fully integrated in the probability distribution of returns, but the proposed partition allows to include the defaulted scenarios always in the negative probability bucket.

QUESTION 21 (§ 2.4.4.2 OTHER METHODOLOGICAL ISSUES TO CALCULATE PERFORMANCE IN EACH SCENARIO)

Do You think that such redemption events should be considered in the performance scenarios?

Triggered redemption events connected with financial products like auto-callable or knock-our products can be easily modelled in the probabilistic framework described above; the final probability distribution of the returns would then consider the effects of those sophisticated contractual terms. More difficult, if not unfeasible, appears the modelisation of what appears to be a mere faculty of the investor, like a voluntary redemption. Inserting performance scenarios - calculated at specific times to highlight the impact of redemption events - would surely help the investor's comprehension.

QUESTION 22 (§ 2.4.4.2 OTHER METHODOLOGICAL ISSUES TO CALCULATE PERFORMANCE IN EACH SCENARIO)

Do You think that performance in the case of exit before the recommended holding period should be shown? Do You think that fair value should be the figure shown in the case of structured products, other bonds or AIFs? Do You see any other methodological issues in computing performance in several holding periods?

Again, we are talking exclusively of probability scenarios and dismissing what-if representations. From a general point of view, it could be useful adding more information related to early redemption, but it may prove technically difficult or too costly for certain products. In fact, the construction of the probability distribution of the returns at an arbitrary point in time could require in some cases the modelisation of the behaviour of all the underlying financial variables over time, an analytical and computational burden that may not worth the game.

QUESTION 69 (§ 3.1.3.2 SPECIFIC ISSUES RELATED TO CERTAIN TYPE OF COSTS: CALCULATION OF THE FAIR VALUE)

Do You agree with the general framework outlined above?

From our point of view, in order to highlight costs and fees, a proper calculation of the fair value of the PRIIP is always needed. In this way the investor will be immediately aware that any gap between price and fair value is a cost he is paying, either explicitly or not. Indeed, apart from explicit up-front charges, whose amount at the subscription date is a known constant to be immediately subtracted from the price, the discovery process of the fair value requires proper estimation of the negative impact of any cost item (whose amount is often random) applied during the time of the PRIIP.

In this perspective, we fully agree with the general framework outlined in the consultation paper.

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