



PRIIPS – Once again!

PRIIPS – New draft, New scenario

It moves on to the next round. Last September, the European Parliament demanded improvements on the regulation of **packaged retail investment and insurance based products (PRIIP)**. Now, the European Commission has published a new draft on the regulatory technical standards (RTS). The biggest innovation: In addition to the three "normal" performance scenarios a so-called stress scenario is introduced.

That means for **every key information document (KID)** a fourth scenario must be calculated in addition to the optimistic, moderate and pessimistic one. The new scenario has some surprising characteristics. While for the three regular scenarios the underlying volatility of the full five year performance history is used for the calculation, only the most volatile phase of this period is used for the stress scenario.

The simulation of the stress scenario is based on a very "stressful" market period. Yet not enough: To determine the stress scenario an extremely pessimistic value from the simulation has to be taken. For certificates with a term to maturity of more than one year it is the 5th percentile, which is the value of the simulation that is lower in only 5% of the cases. For certificates with a term to maturity of less than a year even the first percentile must be used.

PRIIPS – New **stress-scenario** becomes a **"horror"-scenario**

In comparison: For the determination of the regular pessimistic scenario, the 10th percentile is used – based on a simulation that includes the full 5-year performance history of the underlying.

The combination of a simulation based on highly volatile performance data and a very pessimistic quantile generates a real "horror"-scenario. It will frequently be well below the regular pessimistic scenario.

In addition to the inherently extreme design, the new stress scenario leads to another challenge: When the term to maturity of the certificate changes to less than a year, suddenly and without transition, the first instead of the 5th quantile has to be taken (and also the data basis for the simulation is narrowed to more volatile values). The result is a dramatic leap. The stress scenario looks significantly worse from one day to the next. However, the regular performance scenarios will change very little, or not at all.

PRIIPS – Erratic stress scenario

To illustrate the leap, here is an example with a common DAX discount certificate with a strike at 12,500 points. The DAX stands as an example at 12,000 points. The term to maturity of the certificate is now reduced from one year to less than one year. The summary risk indicator (SRI) will not change. It remains at level 4. Also, the three regular performance scenarios hardly change. Only the stress scenario will crash. A day before it stands at -32.2%, now it displays -60,7%.

		1 Year	1 Year + 1 Day
Stress Scenario	Price	3,930.34	6,774.27
	ROI	-60.7%	-32.2%
Optimistic Scenario	Price	10,831.06	10,831.13
	ROI	8.3%	8.3%
Moderate Scenario	Price	10,257.73	10,058.20
	ROI	2.6%	0.6%
Pessimistic Scenario	Price	7,688.68	7,691.7
	ROI	-23.1	-20.3

Why the stress scenario worsens so dramatically from one day to the next will be difficult to explain to investors and financial intermediaries. Dealing with the stress scenario will be very challenging.

More methodological inconsistencies

In addition to the volatility of the stress scenario the PRIIP regulation also leads to unconvincing results in other areas. One example: the performance scenarios of very similar products that correspond to PRIIP RTS are calculated with different methods and thereby cause different results.

For example, The PRIIP key figures of discount certificates - as for all structured products - are calculated in the so-called bootstrapping procedure, which is a Monte-Carlo simulation based on the performance history of the underlying. In the calculation a so-called drift correction is made. This ensures that the calculation reflects only the extent of the historical volatility, and not market trends. Without a drift correction the historical market trends of the past years would lead to very positive or very negative performance scenarios.

For investment funds it is different. The calculation of the PRIIP key figures - in particular the summary risk indicator and the performance scenarios - are based on the Cornish-Fisher expansion. That means instead of a Monte-Carlo simulation the calculation is based on statistical characteristics of the performance history.

Interesting are those cases that in accordance with PRIIP similar products are calculated with different procedures. For example, the behaviour of discount certificates with very high strikes is very similar to index trackers which reflect the price of a stock or an index 1:1. While the discount certificate is calculated via bootstrapping, the calculation of the index tacker is based on the Cornish-Fisher expansion.

Methodological inconsistencies – Discount certificate versus index tracker

Let's take a look at the following calculation of a discounter on the **DAX** with a strike at **15,000 (DE000PS4WD42)** and a maturity at 15 June 2017 compared with a **DAX** index tracker maturing on **22 June 2017 (DE000DE04V85)**. The strike of the discounter certificate is very high in regards to the short maturity, which is why the prospected payout is very similar to the index tracker. This is also reflected in the similar price (**121,07 Euro** and **120,99 Euro** as seen on 28.3.17). However, both certificates have different SRIs of 4 resp. 5 (discounter). Looking at the performance scenarios we also see significant differences, which in turn suggests different risk profiles.

		Discounter	Index Tracker
Optimistic Scenario	Price	11,869.25	12,375.80
	ROI	38.3%	46.8%
Moderate Scenario	Price	9,883.93	10,446.42
	ROI	-2.4%	8.8%
Pessimistic Scenario	Price	8,236.12	8,798.31
	ROI	-36.2%	-23.7%
Stress Scenario	Price	5,502.89	5,285.54
	ROI	-92.2%	-93.0%

On these inconsistencies within the RTS and its different calculation methods the new draft version has no answers.



THANK YOU FOR YOUR ATTENTION!

CONTACT US FOR MORE INFORMATION

ABOUT OUR PRODUCTS:

○ **SIMON ULLRICH**

Managing Partner

Tel.: + 49 (0) 30 57 70 21 - 591

simon.ullrich@smartra.de

DR. HABIL. SÖNKE BLUNCK

Managing Partner

Tel.: + 49 (0) 30 57 70 21 - 595

soenke.blunck@smartra.de

www.smartra.de GmbH

Gustav-Meyer-Allee 25 | 13355 Berlin | Germany

Neuendorfstr 16 d | 16761 Hennigsdorf