

## Automatic interval adjustment of SSPA risk categories

### 1 Introduction

In 2009 the Swiss Structured Products Association SSPA introduced Risk Figure and VaR calculations for structured products listed in Switzerland. Each structured product is assigned a risk category, from 1, or low risk, to 6 for very high risk.

Based on these risk categories, SSPA assigns a Risk Rating to all structured products listed in Switzerland. Risk Figures and Risk Ratings have become a generally accepted standard that renders structured products considerably more transparent for investors and other market participants.

One SSPA Risk Commission task is to monitor the intervals of the six risk categories and to adjust them if necessary. Rather than making adjustments as the need arises – which might cloud the issue for investors and issuers – Risk Commission adjustments are based on a transparent, well-documented procedure.

The rules are based on a series of benchmarks with VaR characteristics, making them comparable to the chosen risk categories and thus allowing determination of the upper and lower VaR limits for each risk category. Historic VaR figures are used to assign interval thresholds, as they are to calculate individual structured products' current VaRs.

According to SSPA rules, market risk, rather than interval adjustments, determine a structured product's movement between risk categories.

This means that benchmark-based risk category intervals must be kept up to date. Otherwise, a critical situation – such as the Lehman Brothers collapse – would find most products in the top risk category, 6, and once the critical situation has subsided, after 250 days (the basis of historic VaRs), most products would end up in the lowest risk category. Such erratic movements would serve neither investors nor issuers.

For instance, a static tracker certificate invested equally in SMI, SX5E, SPX and NKY indices, belongs in risk category 4, regardless of the individual indices' VaRs, because these four indices constitute the risk category 4 benchmark (product risk comparable to that of blue-chip shares). Were risk category intervals not adjusted promptly, the tracker certificate might suddenly end up in category 1, the category with lowest risk, or in 6, with the highest. Intervals periodically determined by SSPA's Risk Commission according to rules based on previously specified benchmark indices prevent this.

## 2 Designation of benchmarks and risk categories

According to SSPA, benchmarks must allow determination of the six risk category intervals.

Risk categories 2, 4 and 5 are based on bond and share indices. No recognized and clearly assignable indices exist for risk categories 1, 3 and 6. That is why the Risk Commission has decided not to define benchmarks, but to calculate the limits for risk categories 1, 3 and 6 as follows:

- Risk category 1: The lower limit for the VaR is 0%. The upper limit is identical to the lower limit for risk category 2. Risk category 2 (“bonds”) refers to typical bond indices.
- Risk category 3: The upper limit of risk category 2 determines the VaR’s lower limit. Its upper limit is identical to the lower limit of risk category 4. Risk category 4 (“blue-chip shares”) refers to typical blue-chip indices.
- Risk category 6: The upper limit of risk category 5 determines the VaR’s lower limit. The maximum VaR of 100% determines its upper limit. Risk category 5 (“small/mid cap shares, emerging markets”) also refers to typical indices.

### 3 Benchmarks

To provide the broadest possible coverage, four representative indices are applied to risk categories 2, 4 and 5, for which recognized indices exist as benchmarks.

Rik Class	Comparable to	Benchmark
1	Money Market, Deposits	No benchmark required
2	Bonds	<ul style="list-style-type: none"> <li>GMLAG (Bloomberg EFFAS Global Market Index)</li> <li>QW5A (iBOXX Euro Corporate Bonds Index)</li> <li>IBOXIG (iBOXX USD Liquid Investment Grade Index)</li> <li>SZGATR (CH Gov. Bonds Index)</li> </ul>
3	Mixed Portfolio (Bonds, Shares)	No benchmark required
4	Blue-chips	<ul style="list-style-type: none"> <li>SMI (Swiss Market Index)</li> <li>SX5E (DJ Euro STOXX 50 Index)</li> <li>SPX (S&amp;P 500 Index)</li> <li>NKY (Nikkei 225 Index)</li> </ul>
5	Small/Mid Caps, Emerging Markets	<ul style="list-style-type: none"> <li>SMIM (Swiss Market Mid Cap Index)</li> <li>HSCEI (Hang Seng China Enterprise Index)</li> <li>MXBR (MSCI Brazil Index)</li> <li>RDXUSD (Russian Depository Index)</li> </ul>
6	Options, Futures	No benchmark required

#### **4 The periodic interval thresholds calculation process**

Derivative Partners Research AG calculates VaRs of the benchmark indices weekly to determine interval thresholds. As is the case for the VaRs of individual structured products, historic VaRs are applied.

The SSPA's Risk Commission is informed of the interval thresholds weekly. Unless an objection is raised, Derivate Partners Research AG automatically adjusts the interval thresholds.

The calculation method undergoes an annual Risk Commission examination. Adjustments are made as needed. Should unforeseeable events such as systemic risks that affect market risk occur, the Risk Commission may decide on measures at the time.