

### New volatility thresholds for the Market Risk Measure (MRM)

As part of the implementation of the PRIIPs Key Information Document regulation, market participants are given the opportunity to provide comments on the recently published Joint Consultation Paper by the European Supervisory Authorities (ESAs). As representatives of the structured products industry, the DDV will be providing detailed comments on the paper.

This particular report (3) follows our PRIIPs report (1), which analysed the proposed methodology in the Joint Consultation Paper (JC 2015 073) underpinning the market risk assessment and PRIIPs report (2), which focused on test calculations of the SRI for structured products, bonds as well as investment funds, also taking into account the Credit Risk Measure (CRM). In conclusion, the DDV identified two major pitfalls in the proposed SRI approach: the methodology, especially the end-of-maturity perspective and the corresponding classification scheme. This report (3) only addresses the volatility thresholds defined in the MRM table on page 38 of the Joint Consultation Paper and proposes appropriate alternative volatility thresholds.

#### PROPOSED VOLATILITY THRESHOLDS

<b>MRM Class</b>	<b>Proposed thresholds*</b>	<b>JC thresholds*</b>
<b>1</b>	<b>&lt; 2.5%</b>	<b>&lt; 0.5%</b>
<b>2</b>	<b>2.5 % - 5%</b>	<b>0.5% - 2%</b>
<b>3</b>	<b>5 % - 15%</b>	<b>2% - 5%</b>
<b>4</b>	<b>15% - 25%</b>	<b>5% - 10%</b>
<b>5</b>	<b>25% - 35%</b>	<b>10% - 15%</b>
<b>6</b>	<b>35% - 45%</b>	<b>15% - 25%</b>
<b>7</b>	<b>&gt; 45%</b>	<b>&gt;25%</b>

\* Thresholds for annualised volatility

The proposed thresholds are based on the calculation methodology defined in the JC. As such, an adjustment of the methodology might lead to different thresholds.

## MAIN FINDINGS AND CONCLUSION

- The proposed classification scheme leads to more adequate and realistic results in order to improve comparability among PRIIPs with similar risk profiles. According to the DDV's proposal, cash investments fall into the same MRM class as short-term government bonds from issuers with high creditworthiness (e.g. Germany).
- Furthermore, the proposed thresholds allow a sufficient differentiation both for low risk investments (bond-like) and mid-risk (broad equity indices / portfolios) to high risk investments (volatile stocks). This is a more appropriate reflection of the broad range of offered PRIIPs.
- Typical core investments (e.g. ETFs / fund investments) with high diversification will be classified as medium risk (3 to 5) in normal market circumstances, while leveraged PRIIPs on comparable instruments (e.g. CFDs, knock-out warrants) are high risk (risk class 7).
- The proposed scheme also leads to more appropriate results in volatile markets compared to the scheme in the JC. In such a market phase, all equity investments (regardless of whether highly diversified or single stock) will likely end up in the highest risk class 7.
- In summary, the proposed scheme is a more appropriate reflection of the characteristics of PRIIPs ranging from very low risk (short-term sovereigns and deposit-like investments) to classical core investments (low to medium risk) up to single-stock and high risk investments.

## RESULTS AND METHODOLOGY

Benchmark	VEV**	Description	MRM Class (JC)	VEV**	MRM class (proposal)	Description
Amundi Cash EUR	0.04 %	Money market, cash	1	0.50 %	1	Money market, cash
Pictet Money Market USD	0.16 %					
iBoxx € Germany Sovereigns 1-3	0.86 %	Short-term bonds	2	2 %	1	Short-term bonds
iBoxx € Eurozone Sovereigns 1-3	1.30 %					
iBoxx € Corporates Overall	2.57 %	Broad bond indices	3	2.50 %	2	Broad bond indices
BNY Mellon Euroland €	3.19 %					
iBoxx € Corporates 5-7	3.48 %	Mid-term bonds	3	5 %	2	Mid-term bonds
iBoxx € Eurozone Sov. 7-10	4.69 %					
Templeton EM Bond \$	6.02 %	Emerging market bonds	4	10 %	3	Emerging markets bonds
BofA ML EM Sovereigns	7.61 %					
iBoxx Sovereigns Eurozone 25+	10.89 %	Long-term bonds	5		3	Long-term bonds
MSCI World	13.91 %	Broad equity indices	5	15 %	3	Broad equity indices
S&P 500	15.45 %	Blue chip indices	6	15 %	4	Blue chip indices
DAX 30	20.92 %					
CAC 40	21.24 %	Blue chip indices	6	25 %	4	Blue chip indices
IBEX 35	23.48 %					
OMV AG	27.33 %	Single stock (blue chip)	7	35 %	5	Single stock (blue chip)
Daimler AG	29.96 %					
Airbus Group	31.07 %	Single stock (large cap)	7	45 %	5	Single stock (large cap)
Banco Santander SA	32.50 %					
Voestalpine AG	36.01 %	Single stock (mid cap)	7		6	Single stock (mid cap)
STMicroelectronics NV	39.94 %					
Electrolux AB-SER B	40.05 %	Single stock	7		6	Single stock
Glencore PLC	43.80 %					
Intesa Sanpaolo SpA	45.08 %	Single stock (volatile)	7		7	Single stock (volatile)
Harmony Gold Mining Co Ltd.	48.13 %					
Alcatel-Lucent	51.98 %	Single stock (highly volatile)	7		7	Single stock (highly volatile)
O2 Czech Republic AS	55.04 %					

\*\* As opposed to the formula given in the JC, the assumption of log normal underlying prices (instead of normal distribution) is used for calculating the VaR Equivalent Volatility (VEV). This approach consistently follows the model prescriptions within the JC. VEVs are calculated on the basis of a recommended holding period of 5 years using underlying price spaces.

**Detailed description:** VEV and derived risk classes according to the proposed and alternative classification schemes were calculated for PRIIPs and underlying instruments as representatives for a certain asset/product class, such as:

- **Money market, Cash:** Results are shown for the following funds: Amundi Cash EUR and Pictet Money Market USD. *The risk exposure here is comparable to deposits.*
- **Short-term bonds:** Results are shown for the following benchmark indices: iBoxx Euro Sovereigns Germany 1-3 and iBoxx Euro Eurozone Sovereigns 1-3. *The risk exposure of these instruments is comparable to short-term government bonds with low default risk (e.g. German, French).*
- **Broad bond indices:** Results are shown for the following benchmark indices: iBoxx Euro Corporates Overall and the fund BNY Mellon Euroland Euro. *The risk exposure of these instruments is comparable to diversified bond portfolios (corporate as well as government).*
- **Medium-term bonds:** Results are shown for the following benchmark indices: iBoxx Euro Corporates 5-7 and iBoxx Euro Eurozone Sovereigns 7-10. *The risk exposure of these instruments is comparable to government bonds of developed states with low default risk (e.g. German, French) and medium-term maturities, as well as corporate bonds with maturities between short and medium-term.*
- **Emerging market bonds:** Results are shown for the following funds: Templeton Emerging Markets Bond USD and BofA ML Emerging Markets Sovereigns. *The risk exposure of these instruments is comparable to bond portfolios containing high-yield emerging market government and corporate bonds.*
- **Long-term bonds:** Result is shown for the iBoxx Sovereigns Eurozone 25+ benchmark index. *The risk exposure of this instrument is comparable to long-term bonds (government and corporate).*
- **Broad equity indices:** Result is shown for the MSCI World benchmark index. *The risk exposure of this index is comparable to well-diversified (worldwide) equity portfolios.*
- **Blue chip indices:** Results are shown for the following benchmark indices: S&P 500, DAX 30, CAC 40 and IBEX 35. *The risk exposure of these indices is comparable to diversified equity portfolios containing stocks of stable countries and industries.*
- **Single stock (blue chip):** Results are shown for the following underlying instruments: OMV AG and Daimler AG. *The risk exposure of these stocks is comparable to low volatile blue chips.*
- **Single stock (large cap):** Results are shown for the following underlying instruments: Airbus Group and Banco Santander SA. *The risk exposure of these stocks is comparable to medium volatile large caps.*
- **Single stock (mid cap):** Results are shown for following the underlying instruments: Voestalpine AG and STMicroelectronics NV. *The risk exposure of these stocks is comparable to medium volatile mid caps.*
- **Single stock:** Results are shown for the following underlying instruments: Electrolux AB-SER B and Glencore PLC. *The risk exposure of these stocks is comparable to volatile stocks.*
- **Single stock (volatile):** Results are shown for the following underlying instruments: Intesa Sanpaolo SpA and Harmony Gold Mining Co Ltd. *The risk exposure of these stocks is comparable to high volatile stocks.*
- **Single stock (highly volatile):** Results are shown for the following underlying instruments: Alcatel-Lucent and O2 Czech Republic AS. *The risk exposure of these stocks is comparable to high volatile stocks or even penny stocks.*

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