Risk Notice 2025-020

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Subject	Margin Parameters
Clearing Service	**DigitalAssetClear**
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LCH SA publishes hereinafter a Notice on the Digital Asset Derivatives risk parameters in the computation of the Initial Margin and Additional Margins for Transactions registered in the Digital Asset Derivatives Clearing System, in accordance with Article 4.2.1.6 of the Digital Asset Derivatives Rule Book and Instruction IV.2-1.

Customer Success Management team (DigitalAssetClear.csm@lseg.com) remains at your disposal for any additional questions.

I. Total Initial Margin (TIM)

The Total Initial Margin (TIM) is based on two components:

1. **VaR based Initial Margin (IM)** (VaR/ES) measure between the maximum of:
   a. A Filtered Historical Expected Shortfall (ES) at 99.7% confidence level;
   b. A weighted average of the above ES with a 75% weight and a 25% weight on Stress losses;
   c. A Historical Simulation VaR at 99.7% confidence level.

   The look-back period is 2500 business days (calendar convention being Target 2) including a 2 years stress period with a 2-day holding period.
   NB: the day before the expiry of the contracts, the holding period is set at 1 day.

   The choice of lambda dictates how much weight is applied to the latest return compared to previous returns when calculating the Exponentially Weighted Moving Average (EWMA). The lambda parameters for this function is set at 0.99 and the EWMA seed volatility being calibrated on 2500 days

   A floor is applied to cap the margin reductions for each portfolio. This diversification floor is set at 20%.

2. **Vega Add-on** to capture additional deformation of the volatility surface above and beyond the historical simulation for Options:

Scenario	Description
1	slope deformation (short term)
2	slope deformation (mid term)
3	slope deformation (long term)
4	slope deformation (global)
5	Inverse slope deformation (short term)
6	Inverse slope deformation (mid term)
7	Inverse slope deformation (long term)
8	Inverse slope deformation (global)
9	curvature deformation (short term)
10	curvature deformation (short term)
11	curvature deformation (short term)
12	curvature deformation (global)
13	butterfly up
14	butterfly up

II. Additional Margins

In addition to the Total Initial Margin, following additional margins are required to cover potential risks which are not pure market risks:

1. Calendar Add-on (CAL)

The Calendar Add-on covers the debtor products' flow usually in USD by euros during the closed business day in the referential calendar since flows cannot be exchanged in USD:

Scenario	FedWire (USD Federal Reserve system)	Target 2 (Euro system)	Example	Cal Add-on
1	Open	Open	Regular day	No
2	Open	Closed	Good Friday	No
3	Closed	Open	Martin Luther King, Jr. Day / Presidents Day / Independence Day, etc.	Yes
4	Closed	Closed	Boxing day	No

2. Liquidity and Concentration Margin (LCRM)

The LCRM methodology aims to measure the additional charge related to the liquidation process of concentrated (compared to market size) and/or illiquid positions.

Following cap and floor input parameters are required:

	Cap/Floor	Parameters
Liquidity Cost	LCRMCap	1
	LCRMCapShortOpt	10
	LCRMFloorOption	0.01
Diversification Floor	DiversificationFloorFuture	0.35
	DiversificationFloorFutureHedge	0.35
	DiversificationFloorOption	1
	DiversificationFloorOptionHedge	1

3. Whale Exposure Margin (WEM)

The Whale Exposure Margin is a floor to Total Initial Margin and LCRM.

WEM Parameter	Parameter
a	-1.2966
b	0.0233
c	0.48
WEM cap	1

4. Expiry Risk Margin (EXM)

The Expiry Risk Margin captures changes in risk profile linked to incoming expiring positions. As such, the add-on computes the TIM and the LCRM algorithms under the assumption of the incoming expiring positions are excluded of the portfolio. Parameters used for these computations are those in this Notice.

5. Legal Entity identifier Margin (LEM)

The LEM aims to capture potential additional risks tied to the concentration of several portfolios under a specific member (at Legal Entity level). The LEM is calculating using the TIM, the LCRM and the WEM algorithm with parameters set in this Notice

III. Fx Haircut

Digital Asset Derivatives Futures and Options products are denominated in USD. All margins (except all product cash flows that remain in USD) are requested in EUR, a Fx Haircut is therefore applied to cover FX risk on top of margins

Currency	Name	Fx Haircut parameter
USD	American Dollar	0.038