



Risk Management Department

**This has been Superseded by Notification No. RMD/FX-FF/21/29 dated 01-Sept-2021 on FxFwd - Default Fund**

No. RMD/ FX-FF/15/30

10/April/2015

FOR INFORMATION OF ALL MEMBERS

**Forex Forwards Segment  
Stress Test Methodology for Default fund**

We refer to our Notifications No. RMD/ FX-FF/13/01 dated 1<sup>st</sup> Jan'2013 on stress testing methodology used for arriving at default fund quantum. In view of the change in stress test methodology followed by CCIL, the methodology to be followed for carrying out such stress test for arriving at the quantum of Default fund has also been revised. The process henceforth will be as under:

2. The process of stress testing in CCIL entails three parts:

- a) Scenario generation.
- b) Simulation of values of trade portfolios and collaterals of all members (clearing participants) using Stress Scenarios.
- c) Identification of the highest possible loss in the account of a member and its affiliates and also identification of possible loss under knock out effect under such scenario.

3. Scenarios Generation is carried out as under:

- a) Anchors used are as under:
  - i. Overnight MIBOR
  - ii. Sovereign Zero interest rates for various tenors up to 30 years and MIBOR OIS rates for 3 and 6 month tenors.
  - iii. USD/INR Spot Rate, 1 Month, 3 Month, 6 Month, 9 Month & 1 Year Forward Premium.
- b) Highest movements in absolute terms (2 Highest Positive & 2 Highest Negative Movements) in each of the Anchors of are recorded.
- c) For each of such movements, movements that occurred in other Anchors on that date are also recorded.
- d) In total, 60 scenarios are considered.
- e) The scenarios thus computed are scaled up by 50%.
- f) Scenarios are re-generated on month-ends

Change in rate applicable for the respective anchors is termed as "Shift Parameter".



4. The Process followed for Stress Testing of Member's portfolios in Forex Forward segment using Stress Scenarios for arriving at the Default fund quantum will be as under:

- i. Outstanding trade portfolios of the members will be revalued based on the above mentioned stress scenarios.
- ii. For this purpose, Notional loss or gain for each settlement date-wise position will be aggregated across settlement dates to arrive at member-wise notional loss or gain (at portfolio level).
- ii. If there is a loss at this stage, it will be compared with the margin available i.e. the sum of Initial Margin, Volatility Margin & MTM margin collected, to arrive at the possible net loss under the scenario.
- iii. Margin credit, on account of MTM gain on forward trades, if used by the member to meet its margin liability in any other segment, is also reduced from the margin available.
- iv. Based on this analysis, impact of possible default by a member on whom CCIL has highest exposure will be arrived at. This amount will be taken as one of the components for arriving at the corpus for the Default Fund. Any loss in the account of any affiliate of such member under the same scenario will also be added to the amount so arrived at.
- v. It is also presumed that under such a stress event, if there is a default by a large market player then upto maximum of 5 entities having short-term rating CCIL-5 and below (or equivalent ratings) may also fail to honor their obligations (termed as Knock out Effect). Hence, possible losses from 5 such entities will also be taken as another component to arrive at final default fund quantum.

The change will come into effect from 29<sup>th</sup> May'15 (i.e. at the time of computation of Default fund quantum for the month of June'15).

Yours faithfully,

For The Clearing Corporation of India Ltd.,

Sd/-

Managing Director

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