



Risk Management Department

**This has been Superseded by Notification No. RMD/FX/USD-  
INR/21/28 dated 01-Sep-2021 on Default Fund  
(revised and updated)**

No. RMD/FX/USD-INR/15/22

March 3, 2015

FOR INFORMATION OF ALL MEMBERS

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

In terms of the provisions of Chapter VIII of the Regulations of the Forex Segment, it has been decided that Clearing Corporation shall maintain a dedicated Default Fund in respect of its Forex Segment.

2. As stated in Clause B therein, the size of the fund will be determined by the Clearing Corporation on the basis of Stress Tests conducted by it. The methodology followed for the process of stress test involves subjecting each Member's trade portfolio to different scenarios of risk.

3. The approach followed by CCIL for stress testing 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.

**A. Scenario Generation:**

- i. Anchors used are as under:
  - a. Overnight MIBOR,
  - b. Sovereign Zero interest rates for various tenors up to 30 years and MIBOR OIS rates for 3 and 6 month tenors:



- c. USD/INR Spot Rate, 1 Month, 3 Month, 6 Month, 9 Month & 1 Year Forward Premium
  - ii. Highest movements in absolute terms (2 Highest Positive & 2 Highest Negative Movements) in each of the Anchors are recorded.
  - iii. For each of such movements, movements that occurred in other Anchors on that date are also recorded.
  - iv. In total, 60 scenarios are considered.
  - v. The scenarios thus arrived at are scaled up by 50%
  - vi. These scenarios are reviewed on month-ends

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

**B. Simulation of trade portfolios and collaterals of members under above-mentioned Stress Scenarios.**

1. Based on the scenarios generated above, stress-testing in Forex Segment is carried out by following the under-mentioned steps;
  - Outstanding forex trade portfolios of all members of this segment are re-valued based on INR/USD exchange rates under the above-mentioned scenarios.
  - Any pre-funding by the member towards enhancement of exposure limit for any settlement date is excluded from the net position of the member for assessing stress loss, as such exposures are fully covered.
  - Dollar denominated Settlement Guaranteed Fund (SGF) balances deposited by the members as margin cover are also revalued under the above-mentioned scenarios and taken into account.
  - Volatility margin collected from the member, if any, is also taken into account.
  - Notional loss in trade portfolio of each member under each scenario is arrived at.



- MTM margin credit available to the member, if used to meet its margin liability is added to the notional loss computed as above.
2. Highest possible loss from the default of a member and its affiliates will be taken as a component for arriving at the corpus for the Default Fund.
  3. It is also presumed that under such a stress event, if there is a default by a large market player, members having short term credit rating of CCIL5 or below may also fail to honour their obligations (termed as Knock out Effect). Hence, to take care of this aspect, possible highest losses from 5 such entities of credit rating of CCIL 5 or below under such scenario will also be taken as the other component of the required corpus of the Default Fund.

This notification shall be effective from **06<sup>th</sup> April, 2015 onwards.**

Yours faithfully,

**For The Clearing Corporation of India Ltd.,**

**Sd/-**

**Managing Director**