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FIMCIR/2015-16/46

March 31, 2015

To

**ALL FIMMDA MEMBERS**

Dear All,

**Re: VALUATION OF INVESTMENTS AS ON 31<sup>st</sup> MARCH 2015**

In accordance with the RBI Master Circular No. DBOD No BP.BC.20/21.04.141/2014-15, dated 1st July, 2014 FIMMDA jointly with PDAI publishes prices/rates for valuation of government securities, bonds, debentures and swaps. FIMMDA has been issuing guidelines / clarifications at periodical intervals in respect of the methodology to be followed for valuation.

The guidelines applicable for valuation as on 31st March, 2015 have been consolidated for the benefit of the market participants and are given in the Annexure.

Yours truly,

(D.V.S.S.V. Prasad)  
Chief Executive Officer

## ANNEXURE

### GUIDELINES / CLARIFICATIONS FOR VALUATION OF INVESTMENTS

The market participants should ensure that the valuation of their investment portfolio is in accordance with the guidelines / circulars issued by the Reserve Bank of India both for Banks and Primary dealers with particular reference to:

- i. RBI Master Circular- Prudential norms for classification, valuation, and operation of investment portfolio by banks dated July 1, 2014.
- ii. RBI Master Circular – Operational Guidelines to Primary Dealers dated July 1, 2014.

#### 1.0 VALUATION OF GOVERNMENT SECURITIES

##### 1.1 Central Government Securities

All Central Government securities which qualify for SLR as well as which do not qualify for SLR will be valued as per prices (yields) published by FIMMDA.

##### 1.2 State Government Securities

FIMMDA will publish the prices (yields) for all the State Government Securities calculated in accordance with “para 3.6.2 of RBI Master Circular for banks dated July 1, 2014” or modified guidelines if any as per Benchmark Committee’s recommendations in this regard.

##### 1.3 Treasury Bills

**For Banks and Bank PDs:** Treasury Bills will be valued at carrying cost. [Para 3.6.1 (iii) of RBI Master Circular for banks dated July 01, 2014 and Section II, Para 3.8 of Master Circular for PD’s dated July 01, 2014]

**For Standalone Primary Dealers:** All securities will be valued on mark to market basis. [Para 11.4 (i) & (iv) of RBI Master Circular – Operational Guidelines to Primary Dealers dated July 1, 2014]

##### 1.4 Floating Rate Bonds (Issued by Central Government)

When traded, traded price is to be used for valuation (provided there are minimum 3 trades and volume of Rs.25 Cr on any single day); when not traded MOT (Market observable and

Tradable) price, if available, will be taken; and in the absence of above, the model prices are generated as per procedure appearing on FIMMDA's website (under Homepage: /G-sec & Valuations:/Valuation of FRBs). The desired spread added is illiquidity spread, as the coupon is that of short term T-Bill whereas the bond is to be held for longer tenor. The desired spreads are determined based on polls conducted once in a fortnight. The submitters identified by FIMMDA will submit the polls. The outliers (Highest & Lowest) will be eliminated and a simple average of the remaining polls will be taken for consideration as the spread for the FRB concerned.

### **1.5 Inflation Indexed Bonds**

When traded, traded price is to be used for valuation (provided there are minimum of 3 trades for Rs.15 Cr); when not traded, model prices are generated as per detailed valuation methodology available on FIMMDA's website (under Homepage: /G-sec valuations /Inflation Indexed Bonds). The model price is multiplied by Inflation Index Ratio and clean price is calculated and published.

### **1.6 Other SLR bonds / securities**

Other eligible SLR bonds will be valued as per Para 3.6.3 of RBI Master Circular by adding 25 bps to the Base Yield curve.

## **2.0 VALUATION OF BONDS AND DEBENTURES, OTHER THAN GOVERNMENT SECURITIES**

For valuation of all other securities FIMMDA's Par/Base Yield Curve, which is derived from the Central Government Securities yield curve should be used.

### **2.1 CORPORATE BONDS**

*(Refer Para 3.7.1 of RBI Master Circular on Valuation of Investments dated 01.07.2014)*

#### **2.1.1 For Bonds traded in the last 15 calendar days (with a minimum of Rs. 5 Cr on any day):**

The traded price is to be used for valuation of that bond.

In order to obviate the need to refer to websites of different Exchanges, FIMMDA consolidates and puts up the following traded data on its website at the end of every month:

- (i) On the working day next to the last trading day of a month: Cumulative Corporate Bond Trades during the last 15 calendar days (Including Failed Trades):

This is a provisional sheet showing the weighted average price and weighted average yield of a bond traded and reported on the Reporting Platforms of NSE (CBRICES), BSE (ICDM) and MCX SX-FIRST. If a bond is traded more than one day during the last 15 calendar days, then the data pertaining to the latest trades are only given. This sheet consolidates all trades in the individual bonds (whether the settlement is T+0, T+1 or T+2) reported on platforms of all three Exchanges.

(ii) On the third working day after the last trading day of a month: Cumulative Corporate Bond Trades during the last 15 calendar days (Excluding failed trades). This is the final sheet showing the weighted average price and weighted average yield of a bond traded, reported and settled.

Since failed trades and trades which were not finally settled cannot be considered as "trades" only the second sheet may be referred to for Valuation purpose.

## **2.1.2 For other bonds (which were not traded any day during last 15 calendar days:**

### **A) BONDS AND DEBENTURES WHICH ARE RATED BY RATING AGENCY/IES**

FIMMDA issues a tenor-wise, industry classification-wise, rating-wise matrix on month-ends for valuation of Corporate Bonds.

- The industry wise classification is as under:
  - i) **PSU, FIs & Banks**
  - ii) **NBFCs**
  - iii) **Corporates**
    - The maturities are 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 15 years.
    - The credit ratings are AAA, AA+, AA, AA-, A+, A, A-, BBB+, BBB and BBB-.
- i) Where the issue or instrument under consideration has two or more different ratings, from different rating agencies, the lowest of the ratings shall be applicable.
- ii) A rating is considered as valid only if it is not more than 12 months old as on date of valuation.
  - a) FIMMDA spread matrix is to be used for valuation of bonds which have not traded in the market. The rated bonds are to be valued by adding the credit spreads to the Par/Base Yield Curve. The Par/Base Yield Curve starts from three-month tenor. For valuation of securities with maturities less than three months the yield for three months tenor should be considered.
  - b) Yield and credit spreads for intermediate tenors for each curve may be arrived at by linear interpolation.

- c) For securities where the residual maturity is more than 15 years, the spreads of 15 years should be added to the base yield of applicable maturity.
- d) The spreads must be added to the base yield corresponding to the residual maturity and not the original maturity.
- e) Bonds with a remaining maturity of less than six months are valued on the 3-month base yield curve plus the relative extrapolated credit spread.
- f) Fixed spreads for bonds rated below AA- :  
The spreads for ratings up to AA- are determined by the traded levels / polls. The spreads for ratings below AA- are determined based on the traded level, even if less, in the Valuation Committee meeting. These spreads are kept fixed for 3 months. FIMMDA will announce the fixed spreads to be applied for the next 3 months or period as may be determined in the Valuation Committee Meeting.
- g) FIMMDA may from time to time stipulate different spreads for any specific category if warranted.
- h) Whenever a Corporate Bond is traded, and reported, the 'traded spread ' (of the weighted average traded yield) of that bond, over the G. Sec Par/Base Yield curve would be used for valuing the bonds of all other bonds of similar rating of the particular Corporate in the particular traded tenor. (Thus, if AAA bond of 'PFC' maturing in 2017 has traded at a price of Rs 101.07 with a spread of 101 bps over the G. Sec Par/Base Yield, all PFC bonds maturing in 2017 would be valued with a spread of 101 bps over the G. Sec Par/Base Yield, whereas the traded bond would be valued at Rs 101.07).
- i) If more than one bond of the particular corporate with the same rating has been traded in that tenor, the higher traded spread would be used for valuing all other similar rated bonds of that corporate in that particular tenor .(Thus if AAA , 8.65 % NABARD -2016 has traded with a spread of 83 bps and 9.7 % NABARD - 2016 has traded with a spread of 73 bps, all other NABARD bonds maturing in 2016 would be valued with a spread of 83 bps)

*(Rationale: To bring the valuation of corporate bonds closer to market traded yield and prices and move away from polled yields and prices)*

**B) BONDS NOT RATED BY A RATING AGENCY BUT A CORRESPONDING RATED BOND OF THE ISSUER EXISTS**

Bonds and debentures, which are NOT rated by a rating agency or have become 'unrated' during their tenor, but a corresponding rated bond of the issuer exists, then the unrated bonds will be valued by marking up the credit spread by a minimum of 25% over the equivalent rated long term bond of the same issuer.

**C) BONDS, DEBENTURES AND PREFERENCE SHARES WHICH ARE NOT RATED BY A RATING AGENCY, AND NO CORRESPONDING RATED BOND OF THE ISSUER EXISTS**

The spreads of BBB- for residual tenor marked up by 25 % will be the applicable credit spreads.

**D) BONDS AND DEBENTURES WHICH WERE RATED BY A RATING AGENCY, BUT BECAME UNRATED DURING ITS TENOR AND NO CORRESPONDING RATED BOND OF THE ISSUER EXISTS**

The spreads of BBB- for residual tenor marked up by 25 % will be the applicable credit spreads.

**E) BONDS / DEBENTURES HAVING SPECIAL FEATURES**

**1. Floating Rate Bonds: (NON SLR)**

Floating Rate Bonds are instruments where the coupon rate is variable and is calculated using a certain predetermined methodology. Crucial to the concept of a floating rate bond is the "Benchmark Rate", which is a market determined interest rate, used for the computation of the coupon rate from time to time. The frequency at which the coupon rate is reset is called the reset frequency, while the frequency at which coupon payment takes place is the coupon payment frequency.

Method of Valuation of Floating Rate Bonds

- 1) Compute the forward benchmark rate for each reset date.

**Computation of the forward rate:**

$$(1 + R_1)^{T_1} \times (1 + F)^{(T_2 - T_1)} = (1 + R_2)^{T_2}$$

Where,

$R_1$  = zero rate for time  $T_1$ ,

$R_2$  = zero rate for time  $T_2$ ,

F = forward rate for period  $(T_2 - T_1)$  at time  $T_1$

While the above formula is most accurate, an approximation may be made as follows:

$$F = (R_2 \times T_2 - R_1 \times T_1) / (T_2 - T_1)$$

- 2) Using the same find the coupon (benchmark plus markup, if any) and the cash flows on the interest payment dates.
- 3) Discount these cash flows by any one of the following methods:
  - i. Discount each cash flow using the Zero-Coupon Yields for that cash flow adjusted for the credit spread corresponding to the rating of the bond.
  - ii. Discount each cash flow using the G-Sec YTM for the full residual maturity of the bond adjusted for the credit spread corresponding to the rating of the bond.

The zero-coupon rates may be taken from any recognized source viz. FIMMDA - PDAI, CCIL, etc.

## 2. MIBOR linked Bonds:

For bonds linked to MIBOR, the Overnight Index Swap (OIS) market quotes will be used to convert MIBOR into fixed rate for the outstanding tenor. The spread over MIBOR (as per the original terms of the issue) will be added to arrive at the notional fixed coupon. Then the bond will be valued similar to a fixed coupon bond and the valuation methodology given above for corporate bonds/debentures should be followed.

## 3. Bonds with Floor and Cap:

Bonds with a Collar spread of 25 basis points or less will be valued like a fixed coupon bond with the coupon being the average of the cap and floor. (*Rationale: If the Collar spread is small the likelihood of the bond hitting the cap or the floor is higher and the bond would behave like a fixed coupon bond*)

For bonds with higher collar spread, the banks should separately value the collar through any recognized model and account for the changes in the P & L account as per rules.

## 4. Staggered redemption bonds:

Staggered redemption bonds would be valued as under:

Approach	Discounting rate	Spreads
Treat as a plain-vanilla bond with residual maturity equal to weighted average maturity of principal flows.	As per weighted average maturity	As per weighted average maturity

## 5. Perpetual Bonds

Perpetual Bonds should be valued at yield to worst basis (inclusive of the applicable spread) where the final maturity of the bonds will be taken to be the longest point on the Base Yield Curve and the applicable spread would be that which is available for the longest tenor for the corresponding rating.

- a. The cash flow of the security relating to the longest point on the Government Securities yield curve is to be considered.
- b. If the securities have a Call Option by the issuer and there is a step-up coupon after the call option, the cash flow should be considered with the step-up coupon after considering the regular coupons up to Call Option date.

Note: For a perpetual bond with single/multiple call option, compute the price for all option dates till the longest point on the base yield curve. Use the price which is the lowest for valuing the bond.

*For securities where the residual maturity is more than 15 years, the spread of 15 year should be added to the yield (as per the base yield curve) of applicable maturity.*

**6. Coupon bearing and non-coupon bearing Deep Discount Bonds:**

The coupon bearing Deep Discount Bonds would be valued as:

- i) Zero Coupon Bonds (Without the coupons)
- ii) The individual coupon flows would be valued as Zero Coupon STRIPS.
- iii) The grossed up present values of (i) + (ii) above would be the price of the coupon bearing Deep Discount Bond at which the bond would be marked to market.

The non-coupon bearing Deep Discount Bonds would be valued as per Para 3.7.3 of RBI Master Circular dated July 1, 2014.

**7. Commercial Paper / Certificate of Deposits:**

Commercial Papers/Certificate of Deposits of tenor less than one year should be valued at carrying cost. (Para 3.7.7 of RBI Master Circular).

**8. Bonds with Call and Put Options:**

- a. Where bonds have simultaneous call and put options (on the same day) and there are several such calls & put options in the life of the bond, the nearest date should be taken for Price/YTM calculation
- b. Only Callable Bonds: Bonds, which are only callable by the issuer, will be valued at yield-to-worst basis. (Yield to maturity & yield to call whichever is higher. Residual tenor for valuation will be the tenor pertaining to yield-to-worst).
- c. Only Puttable Bonds: Bonds puttable by the investor should be valued at yield-to-best basis. (Yield to maturity & yield to put whichever is lower. The residual tenor for valuation will be the tenor pertaining to yield-to-best).

#### 9. **Discom Bonds issued under Financial Restructuring Plan (FRP)**

Under the FRP, initially the Discoms will issue their bonds which will be converted into Special Securities of the concerned State Government on or before 5 years. The coupon of the bonds issued by Discoms may undergo change when the State Government takes over the liability and issues its own Special Security. The Discom bonds be valued as per RBI circular No.DBOD.BP.BC.No.105/21.04.132/2012-13 dated 27.06.2013, considering the bond's maturity as stated by Discoms on its face and/or Term Sheet for which the coupon payments are known. As and when the bond is replaced by a special security by the respective State Government, it will be valued based on the relevant YTM rate for Central Government Securities of equivalent residual maturities of the Special Security issued by the State Government.

#### 10. **Tax-Free Bonds:**

Tax-Free bonds are to be valued at traded price in case a tax free bond was traded in the last 15 days. In case of other Tax Free bonds, the coupon will be grossed up by a factor equal to the income tax rate applicable for the holder. Thereafter, the bond will be valued as per para 3.7.1 of RBI Master circular mentioned above.

The rationale is as under:

The price/value of a bond is the present value of future cash flows. The market yield meant for discounting taxable coupon inflows cannot be obviously used for discounting tax free coupon inflows. So, the option is to gross up the coupon using the applicable tax rate to arrive at taxable coupon. So, if a tax free coupon is 8% and the tax rate is 33%, then the coupon is grossed up to 11.94%. This grossed up coupon is discounted at the market yield applicable to the Industry classification of the bond, residual tenor and credit rating. This becomes logical provided the tax free bonds give really tax free income.

Income tax angle to the treatment of tax-free bonds:

As per Income Tax Act, the holder of a tax free bond can deduct the interest income of tax free bonds from the profit. However, as per Section 14A of the Act, no deduction shall be allowed in respect of any expenditure incurred by the assessee for earning the tax free income for the purpose of computing the taxable income. The result is that the holder of tax free bond will get tax exemption only on the net income (interest earned less interest paid) and not on the entire interest income. In fact, another clause (Rule 8D of Income Tax Rules) insists upon deduction of 0.5% of average investments in tax free bonds as operating expenses apart from interest expenditure.

On the basis of Section 14A and Rule 8D, banks suffered disallowances and the tax benefit was substantially reduced at the assessing officer level. If the tax free coupon is, say, 8% and the total cost of funds is, say, 6%, the tax benefit allowed was only on 2% and not on

8%. If the tax rate applicable to a bank is, say, 33%, the grossing up of coupon can be done only by 99 bps ( $2/(1-33\%)$ ) and not by 394 bps ( $8/(1-33\%)$ ). This results in lesser valuation of tax free bonds because of lesser taxable coupon income.

Income Tax Appellate Tribunal, Pune passed an order, the gist of which is as under:

- a) Capital and reserves are owned funds which are considered as interest free funds generated or available with the bank.
- b) If the investments in tax free bonds are out of the interest free owned funds then no part of interest expenditure can be said to have been incurred for earning such exempt income for the purposes of Sec.14A of the Act.
- c) It is not necessary to have a separate account to prove that the investment in tax free bonds is from the interest free owned funds.
- d) If a bank is having a common pool of funds consisting of both interest free and interest bearing, then it will be presumed that the investments in tax free bonds have been made out of the interest free funds generated or available with the investor.
- e) The condition is that the interest free own funds should be in excess of the investments made in tax free bonds.
- f) Operating or administrative expenses related to the investments in tax free bonds have to be disallowed from the total expenses while calculating the taxable income.

The above order is based on the judgment of Hon'ble Gujarat High Court in the case of Axis Bank Ltd and Hon'ble Bombay High Court in the case of Reliance Utilities and Power Ltd.

As per the order of the tribunal, if a bank is having owned funds in excess of its investments in tax free bonds the entire coupon income less the administrative cost will be tax free. Administrative cost attributable to the tax free bonds will be miniscule.

For the banks whose investment in tax free bonds is out of their owned funds, the real value of the tax free bonds can be known only by grossing up the coupon to taxable level and then discounting the taxable coupon inflows by the market interest rate pertaining to the corresponding tenor and rating.

Other banks having investments in tax free bonds out of their borrowed bonds may have to gross up less (income minus expenses) as explained earlier.

Depending upon the tax rates applicable to the individual investor, the grossing up of coupon will vary.

#### **11. Security Receipts / Pass through Certificates issued by Reconstruction Company / Securitization Company**

Such instruments will be valued as per Net Asset Value (NAV) given by the issuing Reconstruction Company / Securitization Company.

The valuation of PTC should be done depending upon the mix of the assets which constitute the securitized paper. Thus, if the assets fall purely under any one of the 3

categories, the valuation should be done as per the spread applicable to that category. In case there is a mix of categories on the underlying assets of the PTC, the worst valuation applicable should be used. Thus, as per current valuation, if there is a mix of all three categories, then the valuation of NBFCs (being the worst) should be used.

In case of retail underlying assets (e.g. Housing loans, Car loans, Motorcycle loans etc) the matrix applicable to corporate bonds should be used.

Extract as per Section 115TA:

From 1st June, 2013 investors would be receiving net income from securitization trust on PTC's and this income will be exempted from income tax in the hands of the investors. Accordingly, this investment in PTCs (Securitized Paper) can be treated as tax free investments for valuation purpose.

## 12. Priority Sector PTCs

The investments made in PTCs issued by Trusts after acquiring priority sector loan portfolio from NBFCs are giving tax free returns and hence they should be valued as tax free bonds. Tax Free yield (annualized) in the hands of the investor is to be grossed up at the rate of tax applicable to the investor and then the instrument is to be valued as per para 3.7.1 of RBI Master Circular dated 01.07.2013. As far as spread matrix is concerned the worst spread may be considered on a conservative basis.

## 13. Basel III Compliant AT1 Perpetual Bonds

Please follow the contents in DBOD.NO.BP.B/21.06.201/2011-12 dated May 2, 2012 on "Prudential Guidelines for Implementation of Basel III" read with Annexure 6 & 12 in case of loss absorbency.

## 14. Bonds issued as part of a restructuring of an advance

Valuation of such instruments is covered under paragraph 12.1 and 12.3 of RBI's Master Circular - "Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances dated July 01, 2014"

## 15. Preference Shares

Preference shares should be valued as per Para 3.7.4 of the RBI Master Circular (for banks) mentioned above.

However since dividend on Preference shares is Tax free in the hands of the investor, the valuation treatment indicated in Para 5 above (for Tax free bonds) will be applied with the provision that the Preference share is not valued above its redemption value. (Ref Para 3.7.4

(f) of the RBI Master Circular for banks)

**16. Priority Sector Bonds:**

Priority sector bonds issued by All India Financial Institutions (AIFI) and Public Sector Undertakings should be valued as a corporate 'AAA' rated paper.

**17. Securitized Paper**

All Securitized papers would be valued on the basis of the Base Yield Curve and the applicable spreads as per the spread matrix relative to the Weighted Average Maturity of the paper.

**18. Unrated Government guaranteed Non-SLR bonds**

Those bonds that are issued outside the approved market-borrowing programme may be valued as follows:

- a. Spreads over the sovereign risk free yield curve, at the time of issue, will be applicable.
- b. The spread shall be marked up by 15% if the issue is more than 12 months old.
- c. SGL data, available from January 1, 1996 at RBI website ([www.rbi.org.in](http://www.rbi.org.in)), should be used for arriving at the credit spreads at the time of issue. In case of debenture/ bond issued prior to January 1, 1996 the bonds will be valued at cost.

**19. Venture Capital Funds:**

To be valued as per Para 3.9 of RBI Master Circular dated July 1, 2014.

**20. VALUATION OF SWAPS:**

- a. FIMMDA publishes the following benchmarks on a daily basis.
  - i. FIMMDA-NSE MIBID/MIBOR (being replaced by FBIL - OVERNIGHT MIBOR)
  - ii. FIMMDA-Reuters MIFOR
  - iii. FIMMDA-Reuters MITOR
  - iv. FIMMDA-Reuters MIOIS
  - v. FIMMDA-Reuters MIOCS
  - vi. FIMMDA-Reuters Commercial Paper
  - vii. FIMMDA-Reuters Treasury Bill

Where these benchmarks are used for swap transactions, the same will be used for valuing the swap except MIFOR swaps.

## **21. Valuation of MIFOR swaps:**

a. MIFOR fixing is done at 12.00 noon. Due to movement of swap differences during the course of the day, the day end MIFOR value may always undergo a change depending on the time of valuation. Though different banks use MIFOR value taken at different times for valuation of their MIFOR Swaps, there should be consistency in following a particular method as per comprehensive circular issued by RBI in 2007 on derivatives. However, in order to bring in uniformity in month end valuation, the banks should use the FEDAI announced Fx swap differences for arriving at MIFOR values and that should be used for month end valuation of portfolios.

b. In respect of the others, the same should be valued at the same benchmarks that were used at the time of entering into the swap transaction.