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FIMCIR/2023-24/42

Date: March 11, 2024

To,

ALL FIMMDA MEMBERS / STAKEHOLDERS

Re: GUIDELINES ON VALUATION OF INVESTMENTS

FIMMDA issues collated guidelines/clarifications issued from time to time and after due market consultations where applicable, to facilitate the valuation of investments as on $31^{\rm st}$ March every year by Members / Stakeholders.

The Investment Guidelines capture RBI Master Direction - Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions), 2021 (Updated as on December 8, 2022) RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141/2021-22.

RBI has issued, Master Direction - Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions), 2023 RBI/DOR/2023-24/104 DOR.MRG.36/21.04.141/2023-24 dated September 12, 2023 which will come in to effect from 1st April 2024. Members may note changes as applicable while valuing their portfolios of investment from 1st April 2024.

Yours truly,

Sd/-

G. Ravindranath
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 directions / guidelines / circulars issued by the Reserve Bank of India both for Banks and Primary dealers with particular reference to:

- i. RBI Master Direction Classification, Valuation, and Operation of investment portfolio by banks dated August 25, 2021 as amended / updated from time to time and read with Directions on Prudential Regulation for Banks' Investments and Portfolio Management Services contained in the Master Direction Reserve Bank of India (Financial Services provided by Banks) Direction 2016 issued vide DBR.FSD. No.101/24.01.041/2015-16 dated 26th May 2016.
- ii. Master Direction Operational Guidelines for Primary Dealers (Updated as on November 22, 2018).
- iii. RBI/2017-18/146 FMR D. DIRD.7/14.03.025/2017-18 March 31, 2018 on Taking over of publication of daily prices of G-Secs & SDLs by FBIL.

VALUATION OF SECURITIES:

1. Quoted securities:

The 'Market Value' for the quoted securities shall be the prices declared by the Financial Benchmarks India Pvt. Ltd. (FBIL) in accordance with RBI, as amended from time to time. For securities whose prices are not published by FBIL, market price of quoted security shall be as available from the trades / quotes on the stock exchanges / reporting platforms / trading platforms authorized by RBI / SEBI or prices declared by the Fixed Income Money Market and Derivatives Association of India (FIMMDA).

1.1 Central Government Securities:

All Central Government securities (including Floating Rate Bonds (FRBs) and Inflation Indexed Bonds (IIBs)) which qualify for SLR as well as which do not qualify for SLR will be valued as per prices (yields) published by FBIL.

1.2 State Government Securities:

All State Government Securities which qualify for SLR as well as which do not qualify for SLR will be valued as per prices (yields) published by FBIL.

1.3 Treasury Bills:

a) For Banks and Bank PDs: Treasury Bills will be valued at carrying cost

b) For Standalone Primary Dealers:

All securities in AFS and HFT will be valued on mark to market basis.

- i. Traded T-Bills be valued at traded prices; (Minimum Rs. 5 Crs. on the same day).
- ii. Non-traded T-Bills to be valued at yields interpolated from T-Bill curve published by FBIL.

2. Other Unquoted SLR Bonds / Securities:

<u>Central Government Securities / State Government Securities / 'Other Approved' Securities:</u>

Unquoted Securities as above shall be valued on the basis of the prices/YTM rates put out by the Financial Benchmark India Pvt. Ltd. (FBIL).

3. Valuation of Unquoted Non-SLR:

As per RBI Master Direction – Classification, Valuation and Operation of Investment Portfolio of Commercial Banks dated 25th August 2021 (updated as on 8th December 2022):

Debentures/Bonds:

- (a) All debentures / bonds shall be valued on the YTM basis
- (b) Debentures / bonds shall be valued by applying the appropriate mark-up over the YTM rates for Central Government Securities as published by FBIL. (FIMMDA publishes Daily Matrix of Spreads and Yields to facilitate the same)

- (c) The mark-up applied shall be determined based on the ratings assigned to the debentures/ bonds by the credit rating agencies and shall be subject to the following:
 - i. The mark-up shall be at least 50 basis points above the rate applicable to a Government of India security of equivalent maturity for rated debentures/bonds.
 - ii. The rate used for the YTM for unrated debentures/ bonds shall not be less than the rate applicable to rated debentures/ bonds of equivalent maturity.

 Provided that the mark-up for the unrated debentures/ bonds should appropriately reflect the credit risk borne by the bank.
 - iii. Where the debentures / bonds are quoted and there have been transactions within 15 days prior to the valuation date, the value adopted shall not be higher than the rate at which the transaction has been recorded on the Exchanges / trading platforms / reporting platforms authorized by SEBI / RBI.

I. TRADED BONDS:

To facilitate, members' compliance with RBI guidelines as per <u>3 c iii</u> above, FIMMDA consolidates and puts up the Corporate Bond traded data on its website on daily basis.

For detailed Methodology please refer to Chapter 4 of FIMMDA's Corporate Bond Valuation Methodology.

*(Link-https://www.fimmda.org/modules/bonds/corporate-bonds.aspx?m=btd)

II. NON-TRADED BONDS

(i) RATED BONDS:

SPREAD MATRIX METHODOLOGY:

(For detailed Spread Matrix Methodology please refer Chapter 1 of FIMMDA's Corporate Bond Valuation Methodology)

*(Link-https://www.fimmda.org/modules/bonds/corporate-bonds.aspx?m=btd)

a) Valuation of Non-Traded CORPORATE Bonds with Rating up to AA-:

- 1) FIMMDA spread matrix is to be used for valuation of bonds which have not traded in the market. The spreads must be added to the base yield corresponding to the residual maturity and not the original maturity. The 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-month tenor should be considered. Yield for intermediate tenors for each curve may be arrived at by linear interpolation.
- 2) The Spread Matrix starts from six-month tenor. For valuation of securities with maturities less than six months the spread for six-month tenor should be considered. Spread for intermediate tenors for each curve may be arrived at by linear interpolation.
- 3) 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.
- 4) 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 all other non-traded bonds of similar rating of the particular Corporate in the particular traded tenor on that day. (Thus, if AAA bond of 'XYZ Limited-' maturing in 2025 was traded on 31-03-2023 at a price of Rs. 98.53 with a spread of 68 bps over the G. Sec Par/Base Yield, all AAA rated non-traded XYZ Limited bonds maturing in 2025 would be valued on 31-03-2023 with a spread of 68 bps over the G. Sec Par/Base Yield, whereas the traded bond would be valued at traded level).
- 5) If more than one bond of the particular corporate with the same rating was traded in that tenor, the higher traded spread would be used for valuing all other similar rated non-traded bonds of that

corporate in that particular tenor on that day. (Thus, if AAA, 8.84 % XYZ Limited - 2025 was traded with a spread of 57 bps and AAA, 8.40 % PGC - 2025 was traded with a spread of 60 bps all other AAA rated non-traded XYZ Limited bonds maturing in 2025 would be valued with a spread of 60 bps on that day).

b) Valuation of Non-Traded Bonds with Rating below "AA-" Fixed spreads for bonds rated below "AA-":

The spreads for ratings up to AA- are determined by the traded levels / polls adjusted for Market Yield Movement (MYM) as per methodology.

*(Link-https://www.fimmda.org/modules/bonds/corporate-bonds.aspx?m=btd)

The spreads for ratings below "AA-" are determined based on the traded levels of these bonds during the last three months (excluding AT1 bonds, Tax free bonds and SO / CE rated bonds), 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.

(ii) UNRATED BONDS

(a) Bonds which are not RATED by a Rating Agency but a corresponding rated bond of the Issuer exists:

As per RBI guidelines, the rate used for the YTM for unrated debentures / bonds should not be less than the rate applicable to rated debentures / bonds of equivalent maturity. The mark-up for the unrated debentures/ bonds should appropriately reflect the credit risk borne by the bank.

Explanation: 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.

(b) 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.

(c) Bonds and Debentures which were rated by a Rating Agency, but became unrated during their 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.

III. BONDS / DEBENTURES HAVING SPECIAL FEATURES:

As per RBI guidelines, the special securities, which are directly issued by Government of India to the beneficiary entities, which do not carry SLR status will be valued as per prices (yields) published by FBIL.

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. Floating Rate Bonds are instruments where the coupon rate is variable and is usually linked to a benchmark published by a Financial Benchmark Administrator such as FBIL.

Method of Valuation of Floating Rate Bonds:

a) 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:

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

- b) Using the same find the coupon (benchmark plus markup, if any) and the cash flows on the interest payment dates.
- c) 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.

The zero-coupon rates may be taken from any recognized source viz. FBIL.

ii. Discount each cash flow using the FBIL 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. FBIL.

2) MIBOR linked Bonds:

For bonds linked to MIBOR, the Overnight Index Swap (OIS) market quotes will be used to convert MIBOR into a 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 Cap and Floor:

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:

A. 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.	average maturity	As per weighted average maturity

B. Floating Rate Bonds with Staggered Redemption:

For valuation follow one of the discounting methods;

- i) As per ZCYC method: refer para III 1 c (i)
- ii) using YTM method: Residual maturity equal to weighted average maturity of principal flows.

5) Perpetual Bonds:

A. Basel III Compliant AT1 Perpetual Bonds:

Based on the actual trades in AT1 bonds during a particular month, FIMMDA publishes spreads for AT1 bonds after discussions in the monthly valuation committee meetings.

Valuation of AT 1 perpetual bonds will be done based on a Yield to First Call (YFC) basis.

For detailed Methodology please refer to Chapter 1 para 2.1 (E) of FIMMDA's Corporate Bond Valuation Methodology.

*(Link-https://www.fimmda.org/modules/bonds/corporate-bonds.aspx?m=btd)

B. Other Perpetual Bonds:

For Perpetual Bonds 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.

- 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.

6) Deep Discount Bonds (Coupon bearing and Non-Coupon bearing):

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 RBI Master Circular dated 25th August 2021 and updated upto 8th December 2022. That is, ZCBs should be shown in the books at carrying cost, i.e., acquisition cost plus discount accrued at the rate prevailing at the time of acquisition, which may be marked to market with reference to the market value. In the absence of market value, the ZCBs may be marked to market with reference to the present value of

the ZCB. The present value of the ZCBs may be calculated by discounting the face value using the 'Zero Coupon Yield Curve', with appropriate mark up as per the zero-coupon spreads put out by FBIL periodically.

7) Commercial Paper (CP):

Commercial Paper shall be valued at the carrying cost.

8) Certificate of Deposits (CD):

Certificate of Deposits of tenor less than one year should be valued at carrying cost. For ascertaining the market value of CDs, the CD yield curve published by FBIL may be used.

9) Bonds with Call and Put Options:

- a) Where bonds have simultaneous call, and put options (on the same day) and there are several such call & 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 the lowest of the value/s as obtained by valuing the security to final maturity (weighted average maturity in the case of staggered redemption) and valuing the security to call option date/s.
- c) Only Puttable Bonds: Bonds puttable by the investor should be valued at the highest of the value/s as obtained by valuing the security to final maturity (weighted average maturity in the case of staggered redemption) and valuing the security to put option date/s.
 - *(Link SEBI Circular No. MFD/CIR/ 8 / 92 / 2000 dated September 18, 2000)
- d) <u>Bond with Multiple call / put option having different dates:</u>
 Bonds having both call and put options on different dates should be valued at the lowest of the prices computed based on the different option dates and the farthest/ actual maturity date.

10) UDAY Bonds and Bonds issued by State Distribution Companies (Discoms) under Financial Restructuring Plan (FRP):

To be valued s per, RBI Master direction dated 25th August 2021 updated as on 08th December 2022, CHAPTER-V Valuation of Investments, 10 para c (ii).

11) Zero Coupon Bonds (ZCBs):

To be valued as per, RBI Master direction dated 25th August 2021 updated as on 08th December 2022, CHAPTER-V Valuation of Investments, 10 para c (iii).

12) Tax-Free Bonds:

In case a Tax-Free bonds has traded in the last 15 days. It has to be valued at traded price. 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 any other bond.

The rationale for grossing up coupon 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 and spread applicable to the issuer segment, credit rating and residual tenor. This logic is tenable if the tax-free bonds give really tax-free income.

Income tax angle to the treatment of tax-free bonds will be as per IT Act provisions as applicable.

13) Investment in Securitized Papers:

(i) Investment in securities issued by Asset Reconstruction Company (ARC):

To be valued as per provision of, RBI Master Direction - Classification, Valuation and Operation of Investment Portfolio of Commercial Banks

(Directions), 2021 Circular No. RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141 /2021-22 dated 25th August 2021 updated as on 08th December 2022, CHAPTER – V Valuation of Investments, 10 Para c (ix).

(ii) Securitized paper (Standard Asset):

To be valued as per provision of, RBI Master Direction – Reserve Bank of India (Securitization of Standard Assets) Directions, 2021 Circular No. RBI/DOR/2021-22/85 DOR.STR.REC.53/21.04.177/2021-22 dated 24th September 2021 updated as on 05th December 2022, CHAPTER – V Requirements to be met by lenders who are investors in securitization exposures, as applicable.

14) Securities (Bonds / Debentures / Preference Share) issued as part of a Restructuring of an advance:

Valuation of such instruments is covered under:

- a) RBI Master Direction Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions), 2021 Circular No. RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141 /2021-22 dated 25th August 2021 updated as on 08th December 2022, CHAPTER V Valuation of Investments, 10 para c (xi).
- b) RBI Master Circular Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances, Circular No. RBI/2023-24/06 DOR.STR.REC.3/21.04.048/2023-24 dated April 1, 2023.

15) Preference Shares:

Preference shares should be valued as per Master Direction - Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions) 2021, Circular No. RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141/2021-22, dated 25th August 2021 updated as on 08th December 2022, CHAPTER – V Valuation of Investments, 10 para c (iv).

16) Priority Sector Bonds:

Priority sector bonds issued by All India Financial Institutions (AIFI) and Public Sector Undertakings should be valued as a PSU/FI as per applicable rating.

17) Unrated Government Guaranteed Non-SLR bonds:

Bonds 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), 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.

18) Valuation of Bonds / NCDs issued by NBFCs now converted as Banks:

In the absence of sufficient traded data and also considering the fact that the NBFCs which originally issued the bonds are no more existing, it was decided in the valuation committee meeting held on 04.12.2017 that the bonds will be valued as bonds issued by banks.

19) Valuation of Recapitalization bonds:

Government of India (GOI) issues these bonds to specific banks for specified amounts. These are not transferrable or tradeable.

For valuation, please refer RBI Master directions vide Circular No. RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141/2021-22, dated 25th August, 2021, updated as on 08th December 2022, CHAPTER–V Valuation of Investments, para 9 a (vii).

20) Investment in Bonds issued by Venture Capital Funds (VCFs):

The investment in the bonds of VCFs, if any, shall be valued as per guidelines prescribed for quoted/unquoted bonds in RBI master Direction, as amended from time to time.

21) Valuation of Municipal Bonds:

Municipal Bond are similar to corporate bond (PSU category). Hence applicable valuation of quoted / unquoted bonds of PSU Category may be followed.

IV. VALUATION OF SWAPS:

- a) FBIL publishes the following benchmarks on a daily basis.
 - i. FBIL OVERNIGHT MIBOR
 - ii. FBIL TERM MIBOR
 - iii. FBIL Modified MIFOR
 - iv. FBIL MIBOR OIS
 - v. FBIL Treasury bill
 - vi. FBIL Certificate of Deposits

SWAPs have to be valued on the benchmark rates used for constructing swap transactions.

b) **Valuation of MMIFOR Swaps:**

Modified MIFOR Swaps - These will be valued based on Modified MIFOR swap curve available.

c) Valuation of Swaption:

As decided till the time a robust valuation methodology is developed in consultation with FBIL. Banks should value outstanding Swaption Contracts in their books based on their respective proprietary model devised and approved by Competent Authorities.

- * Above guidelines capture updated instructions of regulators for valuation of Investment portfolio.
- ❖ Notwithstanding guidelines issued above market participants are

- advised to ensure meticulous compliance of all extant Regulatory / Government guidelines as applicable while valuing assets in their respective Investment portfolio as on valuation date.
- ❖ Till the time the Next Valuation Circular is issued all Regulatory Guidelines issued in interregnum will have precedence over these guidelines.

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REFERENCES

Sr. No.	Regulators Name	Circular Number		
1.	RBI	Master Direction – Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions), 2021, vide Circular No. RBI/DOR/2021-22/81 DOR.MRG.42/21.04.141/2021-22 dated 25 th August, 2021. (Updated as on December 08, 2022)		
		RBI Master Circular - Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances, Circular No. RBI/2023-24/06 DOR.STR.REC.3/21.04.048/ 2023-24 dated April 1, 2023.		
		RBI Master Direction – Reserve Bank of India (Securitization of Standard Assets) Directions, 2021 Circular No. RBI/DOR/2021-22/85 DOR.STR.REC.53/21.04.177/2021-22 dated 24th September 2021 updated as on 05th December 2022		
		RBI/2017-18/146 FMRD.DIRD.7/14.03.025/2017-18 Taking over of valuation of Government Securities (G-Sec) by Financial Benchmark India Pvt. Ltd. (FBIL) – valuation of portfolios		
		Master Direction – Operational Guidelines for Primary Dealers (Updated as on November 22, 2018)		
2.	SEBI	SEBI Circular No. MFD/CIR/ 8 / 92 / 2000 dated September 18, 2000		
3.	FIMMDA	Corporate Bond Methodology *(Link-https://www.fimmda.org/modules/bonds/corporate-bonds.aspx?m=btd)		

TERMINOLOGY

Sr. No.	Abbreviation	Elongated	
1.	T-Bills	Treasury Bills	
2.	AT1	Additional Tier 1	
3.	DDB	Deep Discount Bonds	
4.	СР	Commercial Paper	
5.	CD	Certificate of Deposit	
6.	ZCBs	Zero-Coupon Bonds	
7.	ARC	Asset Reconstruction Company	
8.	PSL-PTC	Priority Sector Lending - Pass Through	
		Certificates	
9.	VCFs	Venture Capital Funds	
10.	OIS	Overnight Index Swap	
11.	SRs	Securitized Receipts	
12.	FRP	Financial Restructuring Plan	
13.	MYM	Market Yield Movement	
14.	SO	Structure Obligation	
15.	CE	Credit Enhancement	
16.	GOI	Government of India	
17.	FRBs	Floating Rate Bonds	
18.	IIBs	Inflation Index Bonds	
19.	T-Bill	Treasury Bill	
20.	YFC	Yield to First Call	