Sr. No.	Chronology of Decisions / Changes given effect to Valuation Methodology
1	**For the month of October - meeting held on 1st November, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 31st October 2017 was discussed. While approving the spread matrix, the following traded yields of bonds issued by the representative issuers were found to be not in line with the polled yields.

Sr. no	Segments	Representative Issuers	Rating	Tenor	Traded Yield	Polled Yield	Remark
1	Banks, PSUFI's	Power Finance Corporation Ltd.	AAA	7	7.66%	7.54%	10 Cr. / 1 Trade and Coupon is 9.37
2	Banks, PSUFI's	NTPC-SAIL Power Co. Ltd.	AA	5	7.33%	7.74%	16.8 cr. / 4 Trade
3	NBFCs	LIC and HDFC	AAA	0.5	6.72%	7.23%	290 cr. / 6 trade
4	NBFCs	LIC Housing Finance Ltd.	AAA	2	7.72%	7.29%	10 Cr. / 1 Trade

The above traded yields affected the interpolated yields, for in between tenors wherever applicable e.g. PSU AA polled Yields for 5 year & 7 years were 7.74 % & 8.02 % respectively. 5 year PSU – AA was traded at 7.33 %.

The interpolated yield for 6 year for which there was no poll, was calculated as 7.67 %. Had there been no trade of PSU AA for 5 years, the interpolated yield for 6 years would have been calculated as 7.88 % using polled yields of 7.74 % (5 Yr.) and 8.02 % (7 Yr.).

The valuation committee members agreed that traded yield should be given priority over polled yields but at the same time, if traded yields are taken as they are without applying any filter criteria, the yield matrix will reflect a distorted picture.

The issue was discussed at length and following consensus was arrived at;
a)   For matrix construction purpose, outlier polls are identified and removed. Similarly outlier traded yields are to be identified and ignored while using them in the matrix.
b)   Filter criteria for recognizing traded yields;-
i.   The traded yields will be considered if the difference between the traded yield and polled yield is less than 20 bps
ii.   If the difference between the traded yield and polled yield is 20 bps or more, but number of trades is at least 3 and the volume Rs. 50 Crs.
c)   Outlier traded yields:-
A traded yield will be considered as outlier if the difference between the traded yield and the polled yield is 20 bps or more and trades were in a shallow market (less than 3 trades and volume less than Rs. 50 Crs.)
d)   In order to facilitate identification of outlier trades as mentioned above, the yield matrix will be first constructed using polled yields and interpolated yields for in between

tenors for which polls are not taken and then the polled / interpolated yields will be replaced by the traded yields.

e)   Identification of outlier trades and ignoring them is only for matrix construction. For valuing the traded ISIN, the traded price will be used as per RBI guidelines.

Based on the above norms, the following traded yield were considered as outliers and polled yields were retained;

Sr. no	Segments	Representative Issuers	Rating	Tenor	Traded Yield	Polled Yield	Remark
1	Banks, PSUFI's	NTPC-SAIL Power Co. Ltd.	AA	5	7.33%	7.74%	16.8 cr. / 4 Trade
2	NBFCs	LIC Housing Finance Ltd.	AAA	2	7.72%	7.29%	(10 Cr. / 1 Trade)

Selection of Representative Issuers:

Below mentioned list of representative issuers were finalized for the month of November 2017 (To be used for 15-Nov-2017 and 30-Nov-17)

Rating	Segments	Representative Issuers
AAA	PSU,FI & Banks	(1) PFC (2) REC
AAA	NBFC	(1) HDFC (2) LIC Housing Finance
AAA	Corporates	(1) Reliance Ports and Terminals Limited (2) ULTRATECH CEMENT LIMITED (3) RIL
AA+	PSU,FI & Banks	Andhra Bank - AT2
AA+	NBFC	(1) Sundaram Finance Ltd (2) Aditya Birla Finance Limited (3) L & T Fin.
AA+	Corporates	(1) Hindalco Industries Ltd.
AA	PSU,FI & Banks	-
AA	NBFC	(1) Tata Motors Finance Ltd
AA	Corporates	(1) Vedanta Limited
AA-	PSU,FI & Banks	-
AA-	NBFC	(1) Hinduja Leyland Finance Ltd. (2) Srei Equipment Finance Ltd
AA-	Corporates	(1) JSW Steel Limited (2) JSW Energy Ltd.

Valuation of AT-1 Bonds: Traded spreads during the month of October 2017 were presented to the members along with the previous month spreads. Total of 41 out of 58 AT1 bonds issued were traded. The AT-1 bonds are divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.

Each rating category has two tenors viz. Up to 5 years and above 5 years
After recapitalisation plan was announced on 25-Oct-2017 the yields dripped by 10-20 bps. Hence, trade analysis was done for the whole month trades as usual, and analysis of trades after 25-Oct-2017.

For trades after 25-Oct-17

Ratings / Tenors	Upto 5 Years	Above 5 Years
AA & Above	186 (197)	NA (226)
AA- & Below	323 (417)	223 (337)

For whole month 1-Oct to 31-Oct-17

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	189 (197)	194 (226)
AA-& Below	334 (417)	249 (337)

After due discussion, it was decided that whenever such events take place, the yield prevailing after the event only should be considered. The events will be studied on case to case basis and suitable decision will be taken by the valuation committee.

The spreads approved for AT1 bonds are as under;-

Ratings / Tenors	Upto 5 Years	Above 5 Years
AA & Above	186 (197)	194 (226)
AA- & Below	323 (417)	223 (337)

Note: Figures in brackets are that of last month

Discussion on fixed spread for Corporate Bonds rated below AA-:
For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.

FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 26th July 2017 to 25th October 2017. The ratings of the bonds were cross checked from NSDL & CRISIL website. The full traded data was presented to the participants.
The methodology apprised to the Valuation Committee was as under:
•   Calculate yields wherever it's blank on the traded data of the exchanges.
•   Remove duplicates, Tax free bonds & AT1 bonds.
•   Calculate residual maturity.
•   Calculate Spread over G-sec of corresponding maturity.
•   Arrange segment wise.
•   Sort as per spreads.
•   Ignore the trades with negative spreads.
•   Calculate weighted average spreads.
•   Calculate standard deviation of spreads.
•   Remove outliers which are away from weighted average by 2 standard deviations.
•   Calculate weighted average spreads for the remaining spreads.

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-

(26th July 2017 to 25th October 2017)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	186 (35)		199 (145)		239 (230)	
A+	146 (321)	-40 (286)	153 (153)	-46 (8)	717 (202)	478 (-28)
A	220 (136)	34 (101)	309 (390)	110 (245)	701 (632)	462 (402)
A-	285 (268)	99 (233)	276 (721)	77 (576)	623 (467)	384 (237)
BBB+			986 (557)	787 (412)	585 (NA)	346 (NA)
BBB	111 (NA)	-69 (NA)	781 (1215)	582 (1070)	0 (655)	-239 (425)
BBB-			885 (704)	686 (559)	875 (333)	636 (103)

Note: Figures in brackets are spreads of last quarter (26th July 2017 to 25th October 2017).

Based on the above analysis, the fixed spreads were decided as under:
SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads as existing on 31/10/2017			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each fortnight					
-------- Add following spreads to AA- Spreads --------						
A+	50	75	75	50	75	100
A	75	200	200	75	150	200
A-	125	250	250	125	200	250
BBB+	150	300	300	150	300	325
BBB	175	350	400	175	325	375
BBB-	200	400	450	200	400	450

The above spreads approved by Valuation Committee members will be valid for next 3 months' fortnightly matrix (November-2017, December-2017 and January-2018).

| 2 | **For the month of September - meeting held on 3rd October, 2017** |

Corporate Bond Matrix: The monthly spread matrix as on 29th Sep 2017 was discussed. The spread matrix was approved by members.

Selection of Representative Issuers: Below mentioned list of representative issuers were finalized for the month of October 2017 (To be used for 13-Oct-2017 and 31-Oct-17)

Rating	Segments	Representative Issuers
AAA	PSU,FI & Banks	(1) PFC (2) REC
AAA	NBFC	(1) HDFC (2) LIC Housing Finance
AAA	Corporates	(1) Reliance Ports and Terminals Limited (2) ULTRATECH CEMENT LIMITED (3) RIL

AA+	PSU,FI & Banks	-
AA+	NBFC	(1) Sundaram Finance Ltd (2) Aditya Birla Finance Limited (3) L & T Fin.
AA+	Corporates	(1) Hindalco Industries Ltd.
AA	PSU,FI & Banks	(1) NSPCL (NTPC-SAIL Power Company Limited)
AA	NBFC	(1) Tata Motors Finance Ltd
AA	Corporates	(1) Vedanta Limited
AA-	PSU,FI & Banks	-
AA-	NBFC	(1) Hinduja Leyland Finance Ltd
AA-	Corporates	(1) JSW Steel Limited (2) JSW Energy Ltd.

Valuation of AT-1 Bonds: Traded spreads during the month of August 2017 were presented to the members along with the previous month spreads. Total of 30 out of 54 AT1 bonds issued were traded. The AT-1 bonds are divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.
Each rating category has two tenors viz. **Up to 5 years** and **above 5 years**
After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	197 (175)	226 (237)
AA-& Below	417 (368)	337 (336)

Note: Figures in brackets are that of last month.

3	**For the month of August - meeting held on 1st September, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 31st July 2017 was discussed. While approving the spread matrix, the following traded yields of bonds issued by the representative issuers were considered by the committee as outliers and hence polled yields were retained;

Sr. no	Representative Issuers	Segment	Rating	Tenor	Traded Yield	Polled Yield	Remark
1	Tata Motors Limited	Corporates	AA	4	7.42%	7.68%	It trades as AA+
2	Cholamandalam Investment And Fin. Co. Ltd	NBFCs	AA	10	8.67%	8.10%	Sub debt
3	Power Finance Corporation Ltd.	Banks, PSUFI's	AAA	1	6.93%	6.73%	

In case of Power Finance Corporation Ltd. segment PSUFI's Banks Rating – AAA, 10 year tenor, the polled yield of 7.40% was to be replaced with traded yield of 73.72%. However, the published yield of 73.72% was wrong. Correct XIRR yield was 7.4021 %. Accordingly, traded yield was changed/.

Selection of Representative Issuers: The CEO informed that the submitters held meeting, on 27th July 2017 and discussed about refinement procedure for selection of representative

issuers which will improve the Polling by identified Submitters. The following suggestions were made:-

a) SO rated bonds will not be selected as representative issuers
b) Only secondary market trades may be used for selecting representative issuers
c) The submitters may select representative issuers based on month's traded data and the same will be discussed in the valuation committee meeting.
d) The representative issuers finalized in the valuation committee meeting will be used for 1 month (next two fortnights).

Below mentioned list of representative issuers were accordingly finalized for the month of September 2017 (To be used for 15-Sept-2017 and 30-Sept-17)

Rating	Segments	Representative Issuers
AAA	PSU,FI & Banks	(1) PFC (2) REC
AAA	NBFC	(1) HDFC (2) LIC Housing Finance
AAA	Corporates	(1)Reliance Ports And Terminals Limited (2) Ultratech Cement Limited (3) Reliance Industries Limited
AA+	PSU,FI & Banks	(1) National Insurance Company Limited
AA+	NBFC	(1)Sundaram Finance Ltd (2) Aditya Birla Finance Limited (3) L&T Finance Ltd.
AA+	Corporates	(1) Apollo Tyres Ltd
AA	PSU,FI & Banks	(1) NSPCL (NTPC-SAIL Power Company Limited) (2) Energy Efficiency Services Limited
AA	NBFC	(1) Cholamandalam Investment & Finance Co Ltd (2) Tata Motors Finance Ltd
AA	Corporates	(1) Vedanta Limited (2) Hindalco Industries Ltd.
AA-	PSU,FI & Banks	-
AA-	NBFC	(1) Hinduja Leyland Finance Ltd
AA-	Corporates	(1) JSW Steel Limited

 Valuation of AT-1 Bonds: Traded spreads during the month of August 2017 were presented to the members along with the previous month spreads. Total of 33 out of 54 AT1 bonds issued were traded. The AT-1 bonds are divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.
Each rating category has two tenors viz. Up to 5 years and above 5 years
Earlier there was a suggestion to split "up to 5 year" bucket into 2 buckets say a) up to 3 years b) beyond. But it was found that even in August 2017, in AA & above there was just one bond in "up to 3 years" category and the average of split bucket was not different from the average of combined bucket in any significant manner.
After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	175 (195)	237 (239)
AA-& Below	368 (369)	336 (328)

Note: Figures in brackets are that of last month.

| 4 | For the month of July - meeting held on 1st August, 2017 |

<u>Corporate Bond Matrix:</u> The monthly spread matrix as on 31st July 2017 was discussed. The spread matrix was approved by members.

Selection of Representative Issuers:
The CEO informed that the submitters held meeting, on 27th July 2017 and discussed about refinement procedure for selection of representative issuers which will improve the Polling by identified Submitters. The following suggestions were made:-
- e) SO rated bonds will not be selected as representative issuers
- f) Only secondary market trades may be used for selecting representative issuers
- g) The submitters may select representative issuers based on month's traded data and the same will be discussed in the valuation committee meeting.
- h) The representative issuers finalized in the valuation committee meeting will be used for 1 month (next two fortnights).

Below mentioned list of representative issuers were accordingly finalized for the month of August 2017 (To be used for 14-Aug-2017 and 31-Aug-17)

Rating	Segments	Representative Issuers
AAA	PSU,FI & Banks	(1) PFC (2) REC
AAA	NBFCs	(1) HDFC (2) LIC Housing Finance
AAA	Corporates	(1)Reliance Ports And Terminals Limited (2) Ultratech Cement Limited
AA+	PSU,FI & Banks	(1) National Insurance Company Limited
AA+	NBFCs	(1)Sundaram Finance Ltd (2) Aditya Birla Finance Limited
AA+	Corporates	(1) Apollo Tyres Ltd.
AA	PSU,FI & Banks	(1) NSPCL (NTPC-Sail Power Company Limited) (2) Energy Efficiency Services Limited
AA	NBFCs	(1) Cholamandalam Investment & Finance Co Ltd. (2) Tata Motors Finance Ltd.
AA	Corporates	(1)Vedanta Limited (2) Hindalco Industries Ltd. (3) Tata Motors Limited
AA-	PSU,FI & Banks	-
AA-	NBFCs	(1) Hinduja Leyland Finance Ltd.
AA-	Corporates	(1) JSW Steel Limited

Valuation of AT-1 Bonds:

Traded spreads during the month of July 2017 were presented to the members along with the previous month spreads. Total of 30 out of 49 AT1 bonds issued were traded. The AT-1 bonds are divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.
Each rating category has two tenors viz. **Up to 5 years** and **above 5 years**
Earlier there was a suggestion to split "up to 5 year" bucket into 2 buckets say a) up to 3 years b) beyond. But it was found that even in July 2017, in AA & above there was just one bond in "up to 3 years" category and the average of split bucket was not different from the average of combined bucket in any significant manner.

FIMMDA had done 2 different type of analysis:

RATING AND TENOR WISE SPREADS:

Rating / Tenor	2020	2021	2022	2024	2025	2026
	3	4	5	7	8	9
AA+		154	189			
AA	218	221	219		229	242
AA-			307	379	265	
A+		358	377			
A			399			
A-		424		404		
BBB+	520		403			
BBB	602					
BBB-						

	AA & Above	AA- & Below
	Spreads	Spreads
2020		635
2021	182	369
2022	203	341
2024		403
2025	229	265
2026	242	

In view of the difficulties faced by FIMMDA in getting the details of ISIN whenever a new Security is issued, it was reiterated that issuing bank should inform the ISIN details like description, coupon, date of issue (DOI), date of maturity (DOM), date of call/put details, ratings etc. to FIMMDA immediately after the issue has been made. (Mail Id- nonslr@fimmda.org)

After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	195 (225)	239 (243)
AA-& Below	369 (434)	328 (312)

Note: Figures in brackets are that of last month.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.

FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 26th April 2017 to 25th July 2017. The ratings of the bonds were cross checked from NSDL & CRISIL website. The full traded data was presented to the participants.

The methodology apprised to the Valuation Committee was as under:
- Calculate yields wherever it's blank on the traded data of the exchanges.
- Remove duplicates, Tax free bonds & AT1 bonds.
- Calculate residual maturity.
- Calculate Spread over G-sec of corresponding maturity.

- Arrange segment wise.
- Sort as per spreads.
- Ignore the trades with negative spreads.
- Calculate weighted average spreads.
- Calculate standard deviation of spreads.
- Remove outliers which are away from weighted average by 2 standard deviations.
- Calculate weighted average spreads for the remaining spreads.

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(26-April to 25-July 17)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	35 (224)		145 (215)		230 (156)	
A+	321 (212)	286(-12)	153 (265)	8 (50)	202 (220)	-28 (64)
A	136 (246)	101 (22)	390 (372)	245 (157)	632 (430)	402 (274)
A-	268 (200)	233(-24)	721 (414)	576 (199)	467 (346)	237 (190)
BBB+			557 (790)	412 (575)	NA (562)	NA (406)
BBB			1215(1180)	1070(965)	655 (622)	425 (466)
BBB-			NA (704)	NA (489)	333 (NA)	103 (NA)

Note: Figures in brackets are spreads of last quarter (1st February 2017 to 25th April 2017).

Based on the above analysis, the fixed spreads were decided as under:

RATING	FIMMDA Spreads as existing on 31/07/2017			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each fortnight					
-------- Add following spreads to AA- Spreads --------						
A+	25	50	75	50	75	75
A	50	150	175	75	200	200
A-	75	200	200	125	250	250
BBB+	100	300	300	150	300	300
BBB	125	325	325	175	350	400
BBB-	150	350	300	200	400	450

The above spreads approved by Valuation Committee members will be valid for next 3 months' fortnightly matrix (August-2017, September-2017 and October-2017).

5	**For the month of June - meeting held on 1st July, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 30th June 2017 was discussed. The spread matrix was approved by members.

a) Yields of PSU FI's, NBFCs, Corporates have come down in general in 1,5 and 10 year tenors compared with May end yields. But AA rated PSU FI's category showed a spike of about 20 bps. It was found that the representative issuers identified by submitters (U.P. Power Corporation) was traded on 30th June and so its yield replaced the polls given by submitters.

b) Submitters were advised to check their polls against the matrix and analyze the difference vis-à-vis any trades and intimate any significant changes to FIMMDA as well.

Valuation of AT-1 Bonds: Traded spreads during the month of June 2017 were presented to the members along with the previous month spreads. Total of 28 out of 46 AT1 ISIN issued were traded. The AT-1 bonds are divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.

Each rating category has two tenors viz. Up to 5 years and above 5 years

There was a suggestion to split up to 5 year bucket into 2 buckets say a) up to 3 years b) beyond. But it was found that in AA & above there was just one bond in up to 3 years category and the average of rest of the bonds was not different from the arrived at average in any significant manner.

So. It was decided to keep the spreads in the same buckets. From July 2017, it will be worked out in different buckets (a) up to 3 years b) 4-5 years) subject to availability of sufficient trades.

After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	225 (137)	243 (208)
AA-& Below	434 (412)	312 (340)

Note: Figures in brackets are that of last month.

In view of the difficulties faced by FIMMDA in getting the details of ISIN whenever a new Security is issued, it was reiterated that issuing bank should inform the ISIN details like description, coupon, date of issue (DOI), date of maturity (DOM), date of call/put details, ratings etc. to FIMMDA immediately after the issue has been made. (Mail Id- nonslr@fimmda.org)

6	**For the month of May - meeting held on 1st June, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 31st May 2017 was discussed. The spread matrix was approved by members.

Fortnightly Polling - It was informed that barring 2-3, all other submitters submit the polls in terms of yields. By subtracting the interpolated G-Sec par yield, the spreads are calculated. It was decided that all the submitters shall submit the polls in terms of yields only.

Valuation of AT-1 Bonds: Traded spreads during the month of May 2017 were presented to the members along with the previous month spreads. Total of 22 out of 46 AT1 ISIN issued were traded. The AT-1 bonds will be divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.

Each rating category type will have two tenors viz. Up to 5 years and above 5 years

After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years	
AA & Above	137 (233)	208 (226)	
AA-& Below	412 (362)	340*(296)	

*As in the AA- & below / above 5 year bucket - no paper was traded, valuation committee members suggested a spread of 340, keeping the same difference between two tenors (362-296).

Note: Figures in brackets are that of last month.

In view of the difficulties faced by FIMMDA in getting the details of ISIN whenever a new Security is issued, it was reiterated that issuing bank should inform the ISIN details like description, coupon, date of issue (DOI), date of maturity (DOM), date of call/put details, ratings etc. to FIMMDA immediately after the issue has been made. (Mail Id-nonslr@fimmda.org)

7	**For the month of April - meeting held on 29th April, 2017**

Corporate Bond Matrix:
    A. The monthly spread matrix as on 29th April 2017 was discussed. The spread matrix was approve by members.
    B. Corporate Bond spread matrix methodology:

FIMMDA Corporate bond Methodology: (Existing)
"The last traded yield levels for the representative issuers, where available are input. In case of multiple trades, simple average of last traded yields of same/similar issuer is used for the maturity segment. A band of +/- 0.25 year around the matrix segment is used for considering traded securities. Only traded values of Rs. 5 crore and above are considered. Trade cut off time is 5.30 p.m. These are level 1 inputs."

Changes proposed and approved:
a) Last traded yield: Exchanges are publishing last traded yield/price as well as weighted average yield/price. We are calculating WAY/WAP (Weighted Avg. Yield/price) for all the exchanges. Traded volumes are low. Traded yield/price also varies from trade to trade. For valuation purpose average yield/price will better reflect the market. Hence, the committee approved to change as under: "The volume weighted average yield levels for the representative issuers, where available are input. In case of multiple trades, on more than one exchange of same issuer, the weighted average yield/price of all the Exchanges is used for the maturity segment."

b) Band of +/- 0.25 years: Trades are less. In order to capture maximum number of trades, the valuation committee approved expansion of the band from +/- 0.25 to +/- 0.50. For eg. Trades in securities with residual maturity from 0.50 year to 1.50 year will be considered as 1.00 year segment, 1.51 years to 2.50 years as 2 year segment, etc. We take polls for 1, 3, 5,7,10 and 15 year tenors. While publishing spreads we interpolate for in between tenors like 2, 4,6,8,9 years etc. If there are trades in the bonds issued by the representative issuers, then the traded spreads will replace the interpolated ones.

Valuation of AT-1 Bonds: Traded spreads during the month of April 2017 were presented to the members along with the previous month spreads. Total of 29 out of 40 AT1 ISIN issued were traded. The AT-1 bonds will be divided into two categories depending upon (a) Rating up to AA & (b) Rating AA- & below.

Each rating category type will have two tenors viz. Up to 5 years and above 5 years

After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	233 (254)	226 (325)
AA-& Below	362 (393)	296 (360)

Note: *   Figures in brackets are that of last month.

In view of the difficulties faced by FIMMDA in getting the details of ISIN whenever a new Security is issued, it was reiterated that issuing bank should inform the ISIN details like description, coupon, date of issue (DOI), date of maturity (DOM), date of call/put details, ratings etc. to FIMMDA immediately after the issue has been made. (Mail Id-nonslr@fimmda.org)

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.
FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st February 2017 to 25th April 2017. The ratings of the bonds were cross checked from NSDL & CRISIL website. The full traded data was presented to the participants The methodology apprised to the Valuation Committee was as under;

- Calculate yields wherever it's blank on the traded data of the exchanges.
- Remove duplicates, Tax free bonds & AT1 bonds.
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange segment wise
- Sort as per spreads
- Ignore the trades with negative spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(01-February to 25-April 17)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	224 (197)		215 (123)		156 (339)	
A+	212 (94)	-12 (-103)	265 (429)	50 (306)	220 (272)	64(-67)
A	246 (230)	22 (33)	372 (375)	157 (252)	430 (533)	274 (194)
A-	200 (NA)	-24 (NA)	414 (694)	199 (571)	346 (635)	190 (296)
BBB+			790 (1015)	575 (892)	562 (574)	406 (235)
BBB			1180 (NA)	965 (NA)	622 (NA)	466 (NA)

				704 (925)	489 (802)		
BBB-							

Note: Figures in brackets are spreads of last quarter (1st July 2016 to 25th October 2016).

Based on the above analysis, the fixed spreads were decided as under:

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads as existing on 30/04/2017			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each fortnight					
-------- Add following spreads to AA- Spreads --------						
A+	50	150	150	25	50	75
A	75	200	200	50	150	175
A-	100	250	275	75	200	200
BBB+	125	300	300	100	300	300
BBB	150	325	325	125	325	325
BBB-	175	350	350	150	350	300

The above spreads approved by Valuation Committee members will be valid for next 3 months' fortnightly matrix (end May-2017, June-2017 and end July-2017).

8	**For the month of March - meeting held on 1st April, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 31st March 2017 was discussed. The spread matrix was changed consequent to the changes made in G-Sec yields as discussed above. The revised spread matrix was approve by members.

Valuation of AT-1 Bonds: Traded spreads during the month of March 2017 were presented to the members along with the previous month spreads. Total of 29 out of 40 AT1 ISIN issued were traded. The AT-1 bonds will be divided into two categories depending upon (A) Rating up to AA & (B) Rating AA- & below. Each rating category type will have two tenors viz. Up to 5 years and above 5 years.

After discussion, the following spread matrix was approved for the AT-1 bonds.

Ratings / Tenors	Up to 5 Years	Above 5 Years
AA & Above	254 (242)	325 (253)
AA-& Below	393 (403)	360 (262)

Note: * Figures in brackets are that of last month.

In view of the difficulties faced by FIMMDA in getting the details of ISIN whenever a new Security is issued, it was decided that issuing bank should inform the ISIN details like description, coupon, date of issue (DOI), date of maturity (DOM), date of call/put details, ratings etc. to FIMMDA immediately after the issue has been made. (Mail Id- nonslr@fimmda.org)

9	**For the month of February - meeting held on 1st March, 2017**
	Corporate Bond Matrix: The monthly spread matrix as on 28th February 2017 was discussed and approved by members.

Valuation of AT-1 Bonds: Traded spreads during the month of February were presented to the members along with the previous month spreads. The AT-1 bonds will be divided into two categories depending upon (A) Rating up to AA & (B) Rating AA- & below. Each rating category type will have two tenors viz. Up to 5 years and above 5 years

After discussion, it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	Upto 5 Years	Above 5 Years
AA & Above	242 (247)	253(244)
AA-& Below	403 (364)	262(361)

Note: * Figures in brackets are that of last month.

10	**For the month of January -meeting held on 1st Feb, 2017**

Corporate Bond Matrix: The monthly spread matrix as on 31st January 2017 was discussed and approved by members.

Discussion on fixed spread for Corporate Bonds rated below AA-:
For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.

FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st November 2016 to 25th January 2017. The ratings of the bonds were cross checked from NSDL & CRISIL website.
The methodology apprised to the Valuation Committee was as under;
- Calculate yields wherever it's blank on the traded data of the exchanges.
- Remove duplicates, Tax free bonds & AT1 bonds.
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange segment wise
- Sort as per spreads
- Ignore the trades with negative spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(01-November to 25-January 17)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	197 (109)		123 (206)		339 (247)	
A+	94 (198)	-103 (89)	429 (391)	306 (185)	272 (302)	-67 (55)

A	230 (259)	33 (150)	375 (321)	252 (115)	533 (172)	194 (-75)
A-			694 (650)	571 (444)	635 (NA)	296 (NA)
BBB+			1015 (757)	892 (551)	574 (438)	235 (191)
BBB			NA (1090)	NA (884)	NA (505)	NA (258)
BBB-			925 (300)	802 (94)		

Note: Figures in brackets are spreads of last quarter (1st July 2016 to 25th October 2016).

Based on the above analysis, the fixed spreads were decided as under:

<u>SPREADS OVER AA- FOR BONDS RATED BELOW AA-</u>

RATING	FIMMDA Spreads as existing on 31/01/2017			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each fortnight					
-------- Add following spreads to AA- Spreads --------						
A+	75	100	50	50	150	150
A	100	125	125	75	200	200
A-	100	175	175	100	250	275
BBB+	100	175	175	125	300	300
BBB	100	200	200	150	325	325
BBB-	125	225	250	175	350	350

The above spreads approved by Valuation Committee members will be valid for next 3 months' fortnightly matrix (end February-2017, March-2017 and end April-2017).

<u>Valuation of AT-1 Bonds:</u> Traded spreads during the month of January were presented to the members along with the previous month spreads. The AT-1 bonds will be divided into two categories depending upon (A) Rating up to AA & (B) Rating AA- & Below with Residual tenors 3 to 5 years & 7 to 10 years in each category. There are ISINs with residual maturity less than 3 years and 7 years. So, it has been decided in the meeting to revise the categorization as up to 5 years (instead of 3 to 5 years) and above 5 years (instead of 7 to 10 years).

After discussion, it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	Upto 5 Years	Above 5 Years
AA & Above	247 (150)	244 (238)
AA-& Below	364 (351)	361 (347)

Note: * Figures in brackets are that of last month

11	**For the month of December -meeting held on 31st Dec, 2016**
	<u>Corporate Bond Matrix:</u> a) The monthly spread matrix as on 31st December 2016 was discussed. It was pointed out that yields of AAA NBFC for 7, 10, 15 year tenors and AA NBFC for 2 year tenor were out of sync. Yield of 7 yr. & 15 yr. tenors were interpolated / extrapolated. Yield of AAA NBFC for 10 year tenor is the traded yield of Reliance Capital and yield

of 2 year AA NBFC is the traded yield of ECL Finance Ltd which are bonds issued by representative issuers. The members felt that these issuers are not representative issuers through selected as such by the submitters. It was decided to replace the traded yields with polled yields for these tenors. With this change, the matrix was approved.

b) Methodology for calculating spread Matrix: Members were informed that methodology for calculating spread matrix has been documented and published on FIMMDA website. Summery is given below:-

FIMMDA follows the below mentioned steps for construction of fortnightly matrix for corporate bond from the end of month, September-2016.

a. Trades that took place during the past 15 days (fortnight) and 30 days (for month end) are made available to all market participants in the FIMMDA website.
b. Two days prior to every polling date, these lists are sent to all identified submitters for identifying segment /rating / tenor wise representative issuers.
c. The responses are collected and sent to all identified submitters one day before the polls are given by the submitters.
d. Based on the above, data polls are given by the submitters. The poll data are collected and sent to the calculating agent, CRISIL.
e. The traded yields of the bonds issued by the identified issuer/s will be used as Level 1 input by CRISIL while calculating spread matrix.
f. For the remaining rating/tenor in each segment, CRISIL will use the polled data for constructing the matrix.
g. CRISIL does identification of outlier polls based on 2 standard deviations.
h. After exclusion of outlier polls, median of remaining polls is used for construction of matrix.
i. Final matrix is sent to FIMMDA which after vetting, disseminates to the market.

Members suggested some changes in the wording of priority sector PTC valuation in the methodology document. The suggested methodology for valuation of priority sector PTC is as under:

"These Bonds are invested by banks to meet regulatory requirements and the investment decisions are not necessarily for commercial reasons. PSL PTCs are generally held till maturity. So, this results in almost a total lack of secondary market trades to arrive at proper valuation. There is no mechanism to report primary market deals on to a reporting platform. These Bonds will have to be differentiated from normal NON SLR investments as the economic value is different. Investments in RIDF which are similar in nature were classified as HTM (now classified as other assets).

In the view of the above and based on discussions in valuation committee meetings in August and September 2016 as well as in the Board meeting dated 29th August 2016, PSL PTC Bonds may be valued at book value".

<u>Valuation of AT-1 Bonds:</u> Traded spreads during the month of December, 2016 were presented to the members along with the previous month spreads. After discussion, it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	150 (180)	238 (232)
AA-& Below	351 (376)	347 (343)

	Note: * Figures in brackets are that of last month.
12	**For the month of November -meeting held on 1st Dec, 2016**
	Corporate Bond Matrix: The monthly spread matrix as on 30th November 2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Traded spreads during the month of November were presented to the members along with the previous month spreads. After discussion, it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	180 (150)	232 (211)
AA-& Below	376 (353)	343 (284)

Note: * Figures in brackets are that of last month. |
| **13** | **For the month of October -meeting held on 29th Oct, 2016** |
| | Corporate Bond Matrix:
   i.   The monthly spread matrix as on 29th October 2016 was discussed and approved by members.
   ii.   Dates for publication of fortnightly corporate bond matrix: While the month end valuations are given on the last working day of the month, there is a need to formulate the rule for publication of dates for the first fortnightly. It has been decided that it will be polled and matrix generated on 15th of a month. But if it happens to be a holiday, then polling will be done and matrix generated on the previous working day. Matrix will be uploaded on next working day.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.
FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st August 2016 to 25th October 2016. The ratings of the bonds were cross checked from NSDL & CRISIL website.
The methodology appraised to the Valuation Committee was as under;
   - Calculate yields wherever its blank on the traded data of the exchanges.
   - Remove duplicates, Tax free bonds & AT1 bonds.
   - Calculate residual maturity
   - Calculate Spread over G-sec of corresponding maturity.
   - Arrange segment wise
   - Sort as per spreads
   - Ignore the trades with negative spreads
   - Calculate weighted average spreads
   - Calculate standard deviation of spreads
   - Remove outliers which are away from weighted average by 2 standard deviations
   - Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.
Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(01-August to 25-October 16) |

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	109 (215)		206 (253)		147 (220)	
A+	198 (361)	89 (146)	391 (321)	185 (68)	302 (265)	55 (45)
A	259 (190)	150 (-25)	321 (366)	115 (113)	172 (444)	-75 (224)
A-	NA (251)	NA (36)	650 (458)	444 (205)		
BBB+			757 (NA)	551 (NA)	438 (NA)	191 (NA)
BBB			1090 (1076)	884 (823)	505 (NA)	258 (NA)
BBB-			300 (855)	94 (602)		

Note: Figures in brackets are spreads of last quarter (1st May 2016 to 25th July 2016).
Based on the above analysis, the fixed spreads were decided as under:

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads as existing on 31/10/2016			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	50	75	50	75	100	50
A	50	100	175	100	125	125
A-	50	175	175	100	175	175
BBB+	75	175	175	100	175	175
BBB	100	200	200	100	200	200
BBB-	125	225	250	125	275	250

The above spreads approved by Valuation Committee members will be valid for next 3 months' fortnightly matrix (end November-2016, December-2016 and end January-2017).

Valuation of AT-1 Bonds: Traded spreads during the month of October were presented to the members along with the previous month spreads. After discussion, it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	150 (169)	211 (242)
AA-& Below	353 (373)	284 (363)

Note: * Figures in brackets are that of last month.

14	**For the month of September -meeting held on 1st Oct, 2016**
	Corporate Bond Matrix:

i.   The monthly spread matrix as on 30th September 2016 was discussed and approved by members.

	ii. Corporate bond matrix generation: FIMMDA will be following the below steps for construction of fortnightly matrix for corporate bond from the end of month i.e. September-2016.
	
	a) Trades that took place during the past 15 days (fortnight) and 30 days (for month end) are available to all market participants in the FIMMDA website.
	b) Two days prior to every fortnight, these lists are sent o all identified submitters for identifying representative issuers for rating / tenor / segment wise.
	c) The responses are collected and sent to all identified submitters on e day before the polls are given by the submitters.
	d) Based on the above data polls are collected and sent to CRISIL, using polls received from polling participants through FIMMDA will observe the following;
	       i. Identification of outlier polls based on 2 standard deviations from median of all polls.
	       ii. Median of polls to be used for construction of matrix after exclusion of outlier polls identified in step 2.
	e) Dissemination of final matrix and consolidated.
	
	Valuation of PSL PTC Bonds: The valuation issues with PSL PTC bonds were discussed extensively in valuation committee meetings in August and September 2016 as well as in the Board meeting dated 29th August 2016. The gist of the minutes is as under:
	These Bonds are invested by banks to meet regulatory requirements and the investment decisions are not necessarily for commercial reasons. PSL PTCs are generally held till maturity. So, this results in almost a total lack of secondary market trades to arrive at proper valuation. There is no mechanism to report primary market deals on to a reporting platform. These Bonds will have to be differentiated from normal NON SLR investments as the economic value is different. Further the cap applicable to banks for Non SLR bonds excludes these bonds, as these are unlisted. Investments in RIDF which are similar in nature are classified as HTM. So, the market participants felt that the PSL PTC bonds may be classified similarly and the Board concurred with the idea.
	In the view of the above, PSL PTC Bonds may be valued at book value.
	
	Security level Valuation: FIMMDA have formed core committee for Security level valuations for Corporate Bonds comprising of SBI, PNB, ICICI, HDFC, Kotak, Barclays, I-Sec PD, Axis and SBI DFHI to arrive at methodology for computation of valuations.
	FIMMDA asked for traded data of the Corporate Bond portfolio from the identified submitters, which can help understand the possibility of generating such value.
	
	Valuation of AT-1 Bonds: Traded spreads during the month of July were presented to the members along with the previous month spreads. After discussion it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.
	
	<table><tr><td>Ratings / Tenors</td><td>3 to 5 Years</td><td>7 to 10 Years</td></tr><tr><td>AA & Above</td><td>169 (199)</td><td>242 (286)</td></tr><tr><td>AA-& Below</td><td>373 (406)</td><td>363 (335)</td></tr></table>
	Note: * Figures in brackets are that of last month.

15	**For the month of August -meeting held on 1st Sept, 2016**

	Corporate Bond Matrix:
	    i. The monthly spread matrix as on 31st August 2016 was discussed and approved by members.
	    ii. Corporate bond matrix generation:

Security level Valuation: Member were informed that FIMMDA is contemplating to give security level valuation for Corporate Bonds. In this direction, a core team is invited and formed. The core team will meet and discuss ways and methods of arriving at valuation.

Valuation of AT-1 Bonds: Traded spreads during the month of July were presented to the members along with the previous month spreads. After discussion it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	199 (215)	286 (314)
AA-& Below	406 (342)	335 (335)

Note: * Figures in brackets are that of last month.

16	**For the month of July -meeting held on 29th July, 2016**

Corporate Bond Matrix:
 i.   The monthly spread matrix as on 30th July 2016 was discussed and approved by members.
 ii.   Corporate bond matrix generation:

The methodology of matrix generation was explained to the valuation committee members. In a waterfall mechanism traded spreads are considered first. For that, bonds issued by certain issuers in certain segments/ratings are considered.

Rating	Segments	Issuers
AAA	PSU/FI/Banks	REC and PFC
AAA	NBFCs	HDFC and LIC Housing Finance
AAA	Corporates	

Input the last traded yield levels for above mentioned issuers, where available. In case of multiple trades, simple average of last traded yields of same/similar issuer is used for the maturity segment. A band of +/- 0.25 calendar year around the matrix segment is used for considering traded securities. These are level 1 inputs.

For the remaining segments and tenors, the polls received from FIMMDA's identified submitters are considered. Outliers in each segment/rating/tenor are removed using median and one standard deviation method. That is, any poll/s which is/are away from the median value by one standard deviation is/are removed as outlier/s. After the removal of the outlier/s, the median is taken as the representative value. After detailed discussion, the committee approved the method of removing the outlier and using the median as representative value.

The committee also approved the representative issuers for various segments/ratings as under:

Rating	Segments	Issuers
AAA	PSU/FI/Banks	REC
AAA	NBFCs	HDFC and LIC Housing Finance
AA+	NBFCs	Sundaram Finance
AAA	Corporates	Nil

The traded yields of the bonds issued by the above issuers will be used as Level 1 input for calculating spread matrix.

Going forward, it was decided that every fortnight, we circulate the traded data of all bonds during the fortnight/month to the pollers and ask them to identify an issuer in each segment and rating. The traded yields of the bonds issued by the identified issuer/s will be used as Level 1 input while calculating spread matrix.

Earlier, in the valuation committee meeting held on 01.07.2015, it was decided that FIMMDA should indicate the names of 2/3 top traded issuers in each tenor/rating/category based on which the submitters would poll. In about 4-5months' time (1st December 2015), the submitters opined that sometimes, a bond trades the most due to various reasons but it may not be a representative of the rating, tenor. So, we discontinued the practice and gave the details of all Bonds traded during the month. The polling was being done for each rating and tenor as per the perception of the submitter (as there could be many bonds in the same tenor and rating). So, the polls vary and sometimes, the difference could be large. So, in the meeting held on 30-07-2016, it was decided that identification of representative issuers may be done by the identified submitters on the basis of traded data 2-3 days before the month / fortnight end. These identified representative issuers name will be shared with all the submitters for polling purpose.

One day prior to polling on each fortnight / month, FIMMDA will circulate the traded data of all bonds of the fortnight/month along with the names of the identified representative issuers which could, subject to the individual submitter's policy, be used as a reference issuer/bond for polling in that segment and rating. If the representative issuer is not identified, then the submitters will continue to poll as per their expert judgment/internal policy which will be used for generation of the matrix by CRISIL.

Valuation of AT-1 Bonds: Traded spreads during the month of July were presented to the members along with the previous month spreads. After discussion it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	215 (167)	314 (185)
AA-& Below	342 (258)	335 (289)

Note: * Figures in brackets are that of last month.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.
FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st May 2016 to 25th July 2016. The ratings of the bonds were cross checked from NSDL & CRISIL website.

The methodology appraised to the Valuation Committee was as under;
- Calculate yields wherever blank
- Remove Duplication, tax free bonds & AT1 bonds.
- Calculate Residual Maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange segment wise
- Sort as per spreads
- Ignore the trades with negative spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(01-05-2016 to 25-07-2016)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	215 (113)		253 (365)		220 (269)	
A+	361 (NA)	146 (NA)	321 (272)	38 (-93)	265 (275)	45 (6)
A	190 (237)	-25 (124)	366 (347)	113 (-18)	444 (460)	224 (191)
A-	251 (246)	36 (133)	458 (360)	205 (-5)	NA (361)	NA (92)
BBB+			NA (754)	NA (389)		
BBB			1076 (1053)	823 (688)	NA (877)	NA (664)
BBB-			855 (NA)	602 (NA)		

Note: Figures in brackets are spreads of last quarter (1st January 2016 to 30th April 2016).

Based on the above analysis, the fixed spreads were decided as under:

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads as existing on 31/07/2016			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	25	75	75	50	75	50
A	125	150	175	50	100	175
A-	125	150	200	50	175	175
BBB+	150	200	225	75	175	175
BBB	175	225	250	100	200	200
BBB-	200	250	275	125	225	250

The above spreads approved by Valuation Committee members will be valid for next 3 months- end valuations (fortnightly and end August -2016, end September -2016 and end October -2016).

17	**For the month of June -meeting held on 01st July, 2016**

Corporate Bond Matrix: The monthly spread matrix as on 30th June2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Traded spreads during the month of June were presented to the members along with the previous month spreads. After discussion it has been decided to value the AT-1 bonds with the following spreads over corresponding G-sec.

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	167 (154)	185 (172)
AA-& Below	258 (245)	289 (352)

Note: *   Figures in brackets are that of last month.

Valuation of PSL compliant PTCs: Further to the discussion held last (1st June) month, FIMMDA sent a mail to all members to let us know details of their purchase during 2015-16. FIMMDA received data from the 3 banks only who are holding the bonds. About 5 PSU banks reported nil holding. Some banks have expressed their inability to provide the data. It was also observed the data is not available on NSDL/ CDSL websites with yields.

It was agreed that these bonds are bought to fulfill the Priority sector quota as per RBI norms. The number of secondary market trades are bare minimum making it difficult to arrive at the possible valuation yields. It was also observed form the data furnished by few banks that there is large variation in the yields of the bonds that were purchased in the previous year / quarter making it difficult to arrive at an average yield. With limited or almost nil secondary market trades, it is difficult for any bank to poll for such bonds.
In the light of the above, it was desired by the participate members that we may make a reference to RBI to consider valuing them similar to the bonds issued by the NABARD – RIDF as the nature of the bonds (to meet the PS limits stipulated by RBI) is similar.

Change in Polling of Corporate Bond below AA+: During the previous valuation committee meetings we were debating whether it is possible to reduce the no. of polls (ratings, tenors, segments) by the identified submitters of polls. In this direction, FIMMDA collated the daily volumes reported by the three exchanges for the years 2014-15 and 2015-16 as published on our website every day. The traded data from the year 2014-15 & 2015-16 was presented for discussion on polling.

Traded Data of Corporate Bond

Sr. No.	Rating	2014-15 (%)	2015-16 (%)
1	AAA	80.20	75.88
2	AA+	6.44	7.76
3	AA	5.43	5.82
4	AA-	3.81	4.80
5	A+	1.21	1.46
6	A	1.25	1.09
7	A-	0.46	0.16
8	BBB+	0.04	0.07
9	BBB	0.00	0.16
10	BBB-	0.06	0.26
11	Other	0.17	0.27
12	NA & No Rating	0.93	2.26

Analysis revealed that while AAA accounts for 75-80%, the trades with ratings of AA+, AA & AA- account for 7-5% each. In fact, the percentage of AA- rating improved from 3.81 pc to 4.80 pc. i.e. and we cannot ignore AA-. So, it was decided to continue polling for the rating up to AA- till further notice.

18	**For the month of May -meeting held on 1st June, 2016**

Corporate Bond Matrix: The monthly spread matrix as on 31st May 2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	154 (131)	172 (164)
AA-& Below	245 (265)	352 (265)

Note: * Figures in brackets are that of last month.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.

FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st January 2016 to 30th April 2016. The ratings of the bonds were cross checked from NSDL & CRISIL website.

The methodology appraised to the Valuation Committee was as under;

- Calculate yields wherever its blank
- Remove duplicates, Tax free bonds & AT1 bonds.
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange segment wise
- Sort as per spreads
- Ignore the trades with negative spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(Jan 16 to March 16)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	113 (98)		365 (217)		269 (206)	
A+	NA (117)	NA (19)	272 (264)	-93 (47)	275 (253)	6 (47)
A	237 (NA)	124 (NA)	347 (289)	-18 (72)	224 (446)	18 (244)
A-	230 (159)	132 (25)	297 (336)	-5 (80)	361 (NA)	92 (NA)
BBB+			754 (NA)	389 (NA)		
BBB			1053 (282)	688 (65)	NA (877)	NA (664)
BBB-			NA (1275)	NA(1058)		

Note: Figures in brackets are spreads of last quarter (1st October 2015 to 31st December 2015).

Based on the above analysis, the fixed spreads were decided as under:

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads as existing on 31/01/2016			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	25	75	75	25	75	75
A	50	150	175	125	150	175
A-	125	175	200	125	150	200
BBB+	150	200	225	150	200	225
BBB	175	225	250	175	225	250
BBB-	200	250	275	200	250	275

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end May -2016, end June -2016 and end July -2016).

Valuation of PSL compliant PTCs: With the requirement of quarterly monitoring of priority sector advances, the issue of PSL compliant PTCs is happening throughout the year and the volume is increasing. The number of banks purchasing these PTCs is also increasing. Hence the members felt that there should be a relook at the valuation of PSL compliant PTCs. Till 31st March 2016, PTCs are valued as tax free bonds i.e., the coupon should 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 01.07.2015. Spread matrix applicable to NBFC category is used for the relevant rating and tenor of PTCs.

After discussion, it was agreed that the spreads applicable to NBFCs category only be used as the issuer SPVs (Special Purpose Vehicles) are floated by NBFCs. Even if the SPV is floated by corporates the spreads applicable to NBFCs category only may be used as the original guidelines are to value them at "worst spreads".

Since the budget for 2016-17 has taken out the tax free status of PTCs, the grossing up of the coupon will not happen. Since the coupon is very low, all PSL compliant PTCs may be valued much below par value. Because of the demand for PSL compliant PTCs, the issuers are not increasing the coupon. Therefore, the prevailing yield for PSL compliant PTCs in the primary market is around 6 to 8 % only. Primary market yields and prices are not reflected in the valuation and hence the members suggested to ascertain the primary market yields through polls or collecting issuance details from the purchasers and use the same for valuation.

It is informed that the deals are mostly bilateral and the yields are privy to the issuers and the purchasers and all banks may not be ready to share the data. Though certain coupons are informed to Central Repositories like NSDL and CDSL they are not indicative of the yields at which the primary market transactions took place. Secondly, the low yields are due to demand from the banks which have not achieved the priority sector targets and the same

yields may not be acceptable to other investors and hence may not represent "Market Yield". There is no trade in secondary market to indicate the secondary market yield / price without which the polling will be near impossible.

The banks were requested to share the primary market issuance data for further analysis.

Another suggestion emanated during the discussion was excluding the PSL compliant PTCs from valuation as in the case of RIDF (Rural Infrastructure Development Fund). Though PTCs are tradable and RIDF is in the nature of deposits with NABARD, FIMMDA may take up the matter with RBI as both instruments are to meet the short fall in priority sector lending.

19	**For the month of April -meeting held on 30th April, 2016**

Corporate Bond Matrix: The monthly spread matrix as on 30TH April 2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	131 (131)	164 (190)
AA-& Below	265 (191)	265 (274)

Note:* Figures in brackets are that of last month.

Discussion on PSL compliant PTCs Corporate Bonds Valuation: The Valuation Committee has decided to send mail to all who has attended the meeting on 30th April, 2016 for their views on Valuation of PTCs in the light of changes proposed in the budget bill for valuation of this instrument.

20	**For the month of March -meeting held on 1st April, 2016**

Corporate Bond Matrix: The monthly spread matrix as on 31st March 2016 was discussed and approved by members.

Valuation of AT-1 Bonds:
Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	131 (136)	190 (166)
AA-& Below	191 (197)	274 (272)

Note:* Figures in brackets are that of last month.

Discussion on Sovereign Gold Bonds Valuation: The Valuation Committee has decided to consider previous week's (Monday - Friday) simple average post meridiem (p.m.) closing price for gold of 999 Purity, published by the India Bullion and Jewellers Association Ltd. (IBJA) for valuation of Sovereign Gold Bonds till valuation guidelines are issued by RBI.

21	**For the month of February -meeting held on 1st March, 2016**

Corporate Bond Matrix: The monthly spread matrix as on 29th February 2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	136 (131)	166 (180)
AA-& Below	197 (225)	272 (284)

Note:* Figures in brackets are that of last month.

The Inter-scheme trades of Corporate Bonds:
The Valuation Committee has decided not to consider inter scheme transfer deals in corporate Bonds reported on the reporting platforms maintained by the exchanges while consolidating the trades and publishing on FIMMDA platform.

22	**For the month of January -meeting held on 29th January, 2016**

Corporate Bond Matrix: The monthly spread matrix as of 31stJanuary 2016 was discussed and approved by members.

Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	131 (127)	180 (158)
AA-& Below	225 (228)	284 (138)

Note:* Figures in brackets are that of last month.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.
FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st October 2015 to 31st December 2015. The ratings of the bonds were cross checked from NSDL & CRISIL website.
The methodology appraised to the Valuation Committee was as under;
- Calculate yields wherever its blank
- Remove duplicates, Tax free bonds & AT1 bonds.
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange segment wise
- Sort as per spreads
- Ignore the trades with negative spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA- (Oct 15 to Dec 15)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-

Rating						
AA-	98 (134)		217 (216)		206 (202)	
A+	117 (99)	19 (35)	264 (269)	47 (53)	253 (263)	47 (61)
A	NA (92)	NA (-42)	289 (368)	72 (152)	224 (446)	18 (244)
A-	230 (159)	132 (25)	297 (336)	80 (120)	NA (503)	NA (301)
BBB+			NA (839)	NA (623)		
BBB			282 (NA)	65 (NA)	877 (NA)	664 (NA)
BBB-			1275 (NA)	1058(NA)	NA (488)	NA (286)

Note: Figures in brackets are spreads of last quarter (1st July 2015 to 30th September 2015).

Based on the above analysis, the fixed spreads were decided as under :

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As existing on 31/01/2016			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	50	100	100	25	75	75
A	75	175	200	50	150	175
A-	125	200	225	125	175	200
BBB+	175	225	250	150	200	225
BBB	200	250	275	175	225	250
BBB-	225	275	300	200	250	275

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end February -2016, end March -2016 and end April -2016).

23	**For the month of December -meeting held on 1st January, 2016**
	Corporate Bond Matrix: The monthly spread matrix as of 31st December 2015 was discussed and approved by members.

Valuation of AT-1 Bonds:

Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	127 (141)	158 (171)
AA- & Below	228 (273)	138 (264)

Note:* Figures in brackets are that of last month.

24	**For the month of November -meeting held on 1st December, 2015**
	Corporate Bond Matrix: The monthly spread matrix as of 30th November 2015 was discussed and approved by members.

Polling of Corporate Bond spreads for valuation- Issuers of Top Traded bonds: In the valuation committee meeting held on 01.07.2015, it was decided that FIMMDA should

indicate the names of 2/3 top traded issuers in each tenor/rating/category based on which the submitters would poll. FIMMDA is following the practice since then.

The members pointed out that sometimes, some a specific bond gets traded more due to various reasons bringing it to the top 1st or 2nd position but that bond may not be a regularly traded bond or representative bond for that tenor / rating / category.

When such a bond is identified as top traded, the polls given by the submitters may vary as some might be considering some other bond in that segment / tenor for submitting polls. So it was decided that instead of giving one or two most traded bond in a segment /tenors FIMMDA may circulate the list of all traded bonds in the month (Excluding failed trades, tax free, AT 1 bonds and rating below AA-) to enable the submitters to study the trades and give their polls for all the tenors and segments required in the matrix.

<u>Valuation of AT-1 Bonds:</u> Based on Traded data & Methodology, following spreads are approved for AT – 1 Bonds;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	141 (154)	171 (154)
AA- & Below	273 (288)	264 (255)

Note: *   Figures in brackets are that of last month.

25	**For the month of October -meeting held on 31st October, 2015**

<u>Corporate Bond Matrix:</u> The monthly spread matrix for October 2015 was discussed and approved by members.

<u>Valuation of AT-1 Bonds:</u> Based on Traded data & Methodology, following spreads are approved for November 2015;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	154* (138)	154 (193)
AA- & Below	288 (253)	255 (274)

Note: * Figures in bracket are that of last month.
      * No Trades in AA & Above - 3 to 5 Years, so spread of 7 – 10 Years taken

<u>Discussion on fixed spread for Corporate Bonds rated below AA-:</u>
For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.

FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st July 2015 to 30th September 2015. The ratings of the bonds were cross checked from NSDL & CRISIL website.
The methodology appraised to the Valuation Committee was as under;
- Calculate yields wherever its blank
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity (Nearest 0.25 years).
- Arrange as per segment wise
- Sort as per spreads
- Calculate weighted average spreads

- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation. Also if the traded spread was negative, valuation committee members felt that a minimum positive spread should be considered. It was decided not to consider Additional Tier 1 (AT1) bonds for this analysis.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA-
(July 15 to September 15)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	134 (184)		216 (186)		202 (227)	
A+	99 (254)	35 (70)	269 (246)	53 (60)	263 (261)	61 (34)
A	92 (98)	-42 (-86)	368 (283)	152 (97)	446 (341)	244 (114)
A-	159 (158)	25 (-26)	336 (402)	120 (216)	503 (NA)	301 (NA)
BBB+			839 (507)	623 (321)		
BBB			NA (371)	NA (185)		
BBB-					NA (488)	NA (261)

Note: Figures in brackets are spreads of last quarter (1st April 2015 to 30th June 2015).

Based on the above analysis, the fixed spreads decided.

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As existing on 31/10/2015			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	50	50	50	50	100	100
A	75	75	75	75	175	200
A-	125	125	125	125	200	225
BBB+	175	175	175	175	225	250
BBB	225	225	225	200	250	275
BBB-	250	250	250	225	275	300

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end November -2015, end December -2015 and end January -2016).

| 26 | **For the month of September -meeting held on 01st October, 2015** |

Corporate Bond Matrix: The monthly spread matrix for October 2015 was discussed and approved by members.

Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for October 2015;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	138 (130)	193 (140)
AA- & Below	253 (170)	274 (180)

* Figures in bracket are that of last month.

Issue in Polling of spreads for Corporate Bond Valuation: Since July 2015, FIMMDA is identifying the most traded bonds in each category / ratings/ tenor and sending to the submitters to enable them to submit their polls based on some uniform traded bonds. It was pointed out by some of the market participants that the rating considered by FIMMDA for this purpose is at variance with the latest ratings of the bonds. FIMMDA modifies the ratings as appearing on the website of exchanges or rating agencies by referring to the NSDL – Corporate Bond Database (www.indiabondinfo.com). To explain the procedure of updating the ratings and to clarify as to why there should be difference in ratings of some bonds, NSDL was requested to participate in the valuation committee meeting.

Mr. Chetan R. Sakharkar (Assistant Manager) from NSDL participated and informed that Credit Rating Agencies have been mandated by SEBI vide circular No.: CIR/IMD/DF/17/2013 dated October 22, 2013, inter alia, to update the ratings of the bonds. The rating agencies are required to inform the ratings / review of ratings to NSDL within 3 days of such rating / review. NSDL follows up with the rating agencies regularly to update / review the ratings of ISIN. Most of the market participants intimated that referring to the NSDL database for seeking information on instruments and are finding it to be useful for further decisions as it is the database where most of the updated information including rating changes as updated by credit rating agencies are available.

It was pointed out by market participants that in some cases, the information related to ratings differ between NSDL and stock exchanges. It might be due to;
1) The ratings were updated on NSDL corporate bond database but the data on stock exchanges was not updated
2) Non-updating of credit ratings on Depositories by Credit Rating Agencies who have been provided secure logins for updating the information.

The participants discussed the issue in detail and it was felt that the change in the rating is sensitive information and the issuer / rating agencies are obliged to inform the change in rating to the Depositaries as per SEBI Circular and the exchanges are obliged to access the database on daily basis and update the information.

It was decided that FIMMDA discusses the issue with the exchanges and takes up with SEBI the cases of issuers / rating agencies not reporting the change in the rating.

27	**For the month of August -meeting held on 01st September, 2015**
	Corporate Bond Matrix: The monthly spread matrix for September 2015 was discussed and approved by members. Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for September 2015;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	130	140
AA- & Below	170*	180

Note * - Weighted average traded spread was 216, which was not accepted by the committee. The pattern observed for AA & above was followed and a spread of 170 was approved.

28	**For the month of July-meeting held on 01 August 15**

Corporate Bond Matrix: The monthly spread matrix for August 2015 was discussed and approved by members. Participants were requested to participate in the polling. It was decided to continue to publish the issuers of 2-3 largely traded bonds so as to serve as indicative securities for polling.

Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months.
FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st April 2015 to 30th June 2015. The ratings of the bonds were cross checked from NSDL & CRISIL website.

The methodology appraised to the Valuation Committee was as under;
- Calculate yields wherever its blank
- Calculate residual maturity
- Calculate Spread over G-sec of corresponding maturity.
- Arrange as per segment wise
- Sort as per spreads
- Calculate weighted average spreads
- Calculate standard deviation of spreads
- Remove outliers which are away from weighted average by 2 standard deviations
- Calculate weighted average spreads for the remaining spreads

It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation. Also if the traded spread was negative then in that case valuation committee members felt that a minimum positive spread should be considered.

Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA- (April 15 to June 15)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	184(136)		186(229)		227(233)	
A+	254(135)	70(-1)	246(155)	60(-74)	261(223)	34(-10)
A	98(108)	-86(-28)	283(307)	97(78)	341(322)	114(89)
A-	158(130)	-26(-6)	402(386)	216(157)	(470)	(237)
BBB+	(427)	(291)	507 (NA)	321(NA)		
BBB			371(175)	185(-54)		
BBB-			NA(319)	NA(90)	488(NA)	261(NA)

Note: Figures in brackets are spreads of last quarter (1st January 2015 to 31st March 2015).

Based on the above analysis, the fixed spreads decided for three months period from August end to October end 2015 were as under.

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As EXISTING on 31/7/2015			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	25	25	25	50	50	50
A	50	75	100	75	75	75
A-	75	150	200	125	125	125
BBB+	100	175	225	175	175	175
BBB	125	200	250	225	225	225
BBB-	150	225	275	250	250	250

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end August-2015, end September-2015 and end October-2015).

Discussion on Valuation of AT-1 Bonds: Based on Traded data & Methodology, following spreads are approved for August 2015;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above	131	179
AA- & Below	179	225*

*Based on logic

29	**For the month of June-meeting held on 01 July 15**

Corporate Bond Matrix: The monthly spread matrix for June 2015 was discussed and approved by members.

Fixed spread for AT1 Corporate Bond:
The spreads on AT-1 bonds issued by banks for the month of June 2015 were discussed and it was decided to amend existing methodology.
The new approved methodology is:-
The AT-1 bonds will be divided into two categories depending upon (A) Rating up to AA & (B) Rating AA- & Below with Residual tenors 3 to 5 years & 7 to 10 years in each category. Traded bonds spreads (Volume Weighted Average) will be considered for calculation of spreads as above. For all bonds in each rating segment & tenor bracket, volume weighted average will be calculated.
The individual spreads so calculated will be pooled for each rating segment & tenor (3 to 5 years / 7 to 10 years) (AA & above, AA- & below) and their volume weighted average will be arrived. Total 4 spreads will be published.
In case there are no trades in any tenor, of a rating, then the spreads prevailing in the second tenors will be considered. (eg. Up to AA category, 3 to 5 years tenor is traded with

a spread of 128 but 7 to 10 years is not traded, then 128 will be considered for 7 to 10 years & vice versa.

Valuation of AT-1 corporate bonds may be done at Yield to first call basis.

Based on Traded data & Methodology, following spreads are approved for June 2015;

Ratings / Tenors	3 to 5 Years	7 to 10 Years
AA & Above		
AA- & Below		

30	**For the month of May-meeting held on 30 May 15**
	Corporate Bond Matrix: The monthly spread matrix for May 2015 was discussed and approved by members. Discussion on fixed spread for AT1 Corporate Bond -: The spreads on AT-1 bonds issued by banks for the month of May 2015 were disused and it was decided to amend the methodology as approved in the Valuation Committee held on May 2, 2015. Point no 8. (b) stands amended to read as "Only traded Bonds spreads will be considered for arriving at the average spreads and the same average spreads will be applied to non-traded bonds". This will be effective from June 2015. The spread calculated for the month of May (160 bps) and circulated in the meeting as per the previous procedure was approved
31	**For the month of April -meeting held on 2 May 15**
	Corporate Bond Matrix: The monthly spread matrix for April 2015 was discussed and approved by members. Discussion on fixed spread for Corporate Bonds rated below AA-: For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months. FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st January 2015 to 31st March 2015. The ratings of the bonds were cross checked from NSDL & CRISIL website. The methodology appraised to the Valuation Committee was as under; - Calculate yields wherever its blank - Calculate Spread over G-sec - Arrange as per segment wise - Sort as per spreads - Calculate weighted average spreads - Calculate standard deviation of spreads - Remove outliers which are away from weighted average by 2 standard deviations - Calculate weighted average spreads for the remaining spreads It was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be far away from the trend, the gaps were filled in by simple interpolation. Also if the traded spread was negative then in that case valuation committee members felt that a minimum positive spread should be considered. Analysis of Traded Spreads (Over G-Sec) of bonds rated below AA- (Jan 15 to March 15)

Segment / Ratings	PSU FIs & Banks	Diff. over AA-	Corporates	Diff. over AA-	NBFCs	Diff. over AA-
AA-	136 (118)		229 (162)		233 (191)	
A+	135 (176)	-1 (58)	155 (234)	-74 (72)	223 (299)	-10 (108)
A	108 (116)	-28 (-2)	307 (304)	78 (142)	322 (315)	89 (124)
A-	130	-6	386	157	470 (173)	237 (-18)
BBB+	427	291	NA (373)	NA (211)		
BBB			175 (146)	-54 (-16)		
BBB-			319	90		

Note: Figures in brackets are spreads of last quarter (1st October 2014 to 22nd January 2015).

Based on the above analysis, the fixed spreads decided for three months period from May end to July end 2015 were as under.

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As EXISTING on 30/4/2015			SPREADS DECIDED IN THE MEETING		
	PSU FIs & Banks	Corporates	NBFCs	PSU FIs & Banks	Corporates	NBFCs
AA-	As arrived at the end of each month					
-------- Add following spreads to AA- Spreads --------						
A+	50	75	100	25	25	25
A	75	150	125	50	75	100
A-	100	175	150	75	150	200
BBB+	125	200	175	100	175	225
BBB	150	225	200	125	200	250
BBB-	175	250	225	150	225	275

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end May-2015, end June-2015 and end July-2015).

Discussion on consideration of traded prices of Corporate Bonds which are traded below G-sec Par yield: At present, the trades in corporate bonds with negative spreads as compared to G-sec par yield are not considered as trades for valuation purpose. This is as per the decision taken in Valuation Committee meeting in the month of October 2013.
It was pointed out that of late many bonds are traded at negative spreads and excluding them will amount to not valuating the bonds at traded price during the last 15 calendar days. Therefore, it was decided by the Valuation Committee members that all trades (with positive or negative spreads) will be considered as trades for valuation purpose.

Discussion on Valuation of AT-1 Bonds: Members desired to have a separate treatment for valuation of AT-1 bonds. After detailed discussion, it was decided as under:
   a) Traded data for the past one month will be considered for arriving at the additional spread over & above the spread Matrix published.
   b) If not traded, then the spreads at which the bonds were issued will be considered for arriving at additional spreads.
   c) Additional spreads will be given by way of footnote.
This exercise will commence from end May 2015.

32	**For the month of March - meeting held on 1 April 15**
	Corporate Bond Matrix: The monthly spread matrix for March 2015 was discussed and approved by members. **Discussion on FIMMDA circular on Valuation of Investment 2015-** The valuation committee members wanted the following change in the valuation circular issued by FIMMDA on 30th March 2015: Para 2.1.2 (B) | Exiting as per circular dated 30-3-2015	Suggested Change

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:
 	
1. The unrated bonds will be valued by marking up the credit spread by a minimum of 20 % over the equivalent rated bond of similar tenure.
2. For the above purpose,"corresponding" would mean, if the unrated bond has a maturity of 't' years, the rated bond should have a maturity not less than t - 0.5 years. For example, if the unrated bond has a residual maturity of 3 years, then the rated bond to be treated as corresponding should have a maturity of at least 2.5 years.
	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:
	
	1. 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. |
	
	It was decided to issue a revised circular incorporating the above change.
	The following points related to valuation were also discussed:-
	    A. **Infra Bonds:** They will be valued like normal bonds.
	    B. **Valuation of Compulsorily Convertible (Partly or Fully) Bonds:** Members sought time to study the matter.

33	**For the month of February -meeting held on 28 February 15**

	Corporate Bond Matrix: The monthly spread matrix for February 2015 was discussed and approved by members.
	
	Discussion on FIMMDA draft on Valuation of Investment Circular 2015- The draft circular incorporating the suggestion received from the members and clarification given during April 2014 to Feb 2015 was discussed and approved with certain modifications. The same will be sent to RBI for vetting before publishing the same on FIMMDA website.
	The following points related to valuation were also discussed:-
	    A. Valuation of CP, CD & T- Bill: Only T-Bills are required to be marked to market by standalone PDs, whereas banks and bank PDs are allowed to carry T-Bills at carrying cost. Pending adoption of IFRS, standalone PDs may also be allowed to carry T-Bills at carrying cost. FIMMDA will take up the matter with RBI.
	    B. Infra Bonds: They will be valued like normal bonds.

	C. Valuation of MIFOR: Market participates desired to follow their own valuation method on a consistent basis for day to day valuation and go by rates published by FEDAI for month end valuation. FIMMDA will take up the matter with RBI. D. Valuation of Compulsorily Convertible (Partly or Fully) Bonds: Members sought time to study the matter. **E.** Corporate Bond Valuation Removal of minimum spread of 50bps: As per para 3.7.1 of RBI Master Circular dated 1.7.2014, the rate used for the YTM for rated debentures/bonds should be at least 50 bps above the rate applicable to a G-Sec of equivalent maturity. The members pointed out that the traded spreads especially in AAA rated PSU bonds are much less than 50bps. Some bonds are even traded at negative spreads. In order to bring the valuation of bonds closer to market traded yield and prices, FIMMDA was requested to take up the matter with RBI for removal of minimum spread of 50bps clause.
34	**For the month of January - meeting held on 31 January 15**
	<u>Corporate Bond Matrix</u>: The monthly spread matrix for January 2015 was discussed and approved by members. <u>Discussion on fixed spread for Corporate Bonds rated below AA-:</u> There are 6 ratings below AA- till BBB-. For bonds rated below AA-, a fixed spread is added to the AA- spread in each segment and that fixed spread is reviewed by the Valuation Committee once in three months. In January, FIMMDA have analyzed the traded spread over the corresponding G-sec (rating wise & segment wise) for the period from 1st October 2014 to 23rd January 2015. The ratings of the bonds were cross checked from NSDL website. The outliers were also removed. The finding was that in general the spreads are higher than that of last quarter ended January 2015. Since the spreads were based on actual trades, it was decided by the committee to fix the fixed spreads as per the traded spreads (after rounding of). Wherever, there was no traded data, or traded spreads were found to be away from the trend, the gaps were filled in by simple interpolation. The fixed spreads decided for three months period from February end to April end 2015 are as under. SPREADS OVER AA- FOR BONDS RATED BELOW AA- _table below_ NOTE: Figures in bold are interpolated / extrapolated spreads.

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As EXISTING on 31/1/2015	SPREADS FIXED IN THE MEETING		
	for all Segments	PSU FIs & Banks	Corporate's	NBFC's
AA-	As arrived at the end of each month			
-------- Add following spreads to AA- Spreads --------				
A+	25	50	75	100
A	50	75	150	125
A-	75	100	175	150
BBB+	100	125	200	175
BBB	125	150	225	200
BBB-	150	175	250	225

The above spreads approved by Valuation Committee members will be valid for next 3 month- end valuations (end February-2015, end March-2015 and end April-2015).

Valuation as per RBI Master Circular July 2014, - Minimum spread clause (50 bps) for Valuation of Corporate Bonds- It was pointed out by some market participants that of late many of the AAA rated Corporate Bonds are traded with very little spread over corresponding G-sec and some Corporate Bonds are traded even with negative spreads. However, the valuations of these bonds do not reflect the market reality as all bonds are to be valued with a minimum spread of 50 bps. FIMMDA made a detailed analysis of AAA bonds traded between 1st October 2014 to 23rd January 2015. The outcome of the analysis was as under:

Analysis of Trades 1st Oct 2014 to 23rd Jan 2015 (After removing Outliers)							
Sr. No	Ratings	Group	Spread Range	Avg. Spreads	Amount in Crs.	No. of Trades	ISIN
1	AAA	Spread upto 50 bps	-24 to 50	30	179000	9543	575
2	AAA	Spread above 50 bps	50 to 200	80	76404	3703	430
3	ALL Ratings				346108	18284	1510

Analysis of Trades 1st Dec 2014 to 23rd Jan 2015 (After removing Outliers)							
Sr. No	Ratings	Group	Spread Range	Avg. Spreads	Amount in Crs.	No. of Trades	ISIN
1	AAA	Spread upto 50 bps	-24 to 50	34	76418	4107	360
2	AAA	Spread above 50 bps	50 to 200	80	48386	2363	325
3	ALL Ratings				175090	8930	1037

The Members Discussed on the above analysis and noted that the proportion of the AAA bonds which were traded at spreads up to 50 bps over G-Sec yield is significantly large which cannot be ignored.

The members also noted that spreads arrived at based on traded yields and polled yields for AAA rated bonds in PSU/FI/Banks segment in all the tenors were less than 50 bps. In other segments, the spreads were less than 50 bps in some tenors. To ensure that valuation matrix given by FIMMDA is in tune with the market, the members felt that FIMMDA should represent to RBI to do away with the minimum of 50 bps clause in its circular enabling Banks/PDs to value the bonds strictly based on FIMMDA spread matrix.

35	**For the month of December - meeting held on 1 January 15**
	Corporate Bond Matrix: The monthly spread matrix for December 2014 was discussed and approved by members.

Discussion on Rationalisation of Polling for Corporate Bond: Presently, there are 4 ratings till AA- and the 0.5, 1, 2, 3, 5, 7, 10, 15 tenors respectively. |

	Suggestion on above discussion: • Banks / PSU / FIs to be merge as a single category – as lack of trades and less issuance . • In the polling of Corporate Bond will be done in the following tenors 1, 3, 5, 10, and 15 only for the Banks / PSU / FI.
36	**For the month of November - meeting held on 29 November 14**
	Corporate Bond Matrix: The monthly spread matrix for December 2014 was discussed and approved by members.
37	**For the month of October - meeting held on 1 November 14**
	Corporate Bond Matrix: The monthly spread matrix for November 2014 was discussed and approved by members. *Discussion with regards to bond rated below AA- :* There are 6 ratings till BBB-. Presently, for bonds rated below AA-, a fixed spread is added to the AA- spread (segment wise) to arrive at the spread for the bond concerned on the basis of valuation committee decision on 01st August, 2014 for a period of 3 months till end October valuation. In October, FIMMDA have analyzed the traded spread over the corresponding G-sec for July, August, September and October (till 22/10/2014). The bonds were chosen as per the rating given on the NSE/BSE reporting platforms. The finding was that in general the spread are lower than that of July 2014. The participants were also shown the following tables. • G-sec month end closing price comparison Sept – Oct 2014. • Movement in AAA rated bonds traded spread (For HDFC, REC and LIC Housing Finance) in July, August, September and October (22.10.2014). • Movement in spreads of AA- rated bonds in July, Aug, Sept and Oct (22/10/2014). • The participants observed that in some cases, the ratings given by NSE/BSE to some corporates were not updated by them and hence the traded spreads are showing greater variance from the actual spreads. However, since there was a large movement in AA- spreads themselves, the participants felt that the existing spreads (for ratings below AA-) may continue for the next 3 months (end November to end January 2015).

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As EXISTING on 31/10/2014	(July-14 to 22-Oct-14) TRADED	As per Banks Website CREDIT SPREADS	SPREADS DECIDED IN THE MEETING
AA-		As arrived at the end of each month		
-------- Add following spreads to AA- Spreads --------				
A+	25	As per tables shown in the meeting	31	25
A	50		58	50
A-	75		124	75
BBB+	100		143	100
BBB	125		98	125
BBB-	150		162	150

The matrix approved by Valuation Committee members will be valid for next 3 month end valuations (end November-2014, end December-2014 and end January-2015).

38	**For the month of September -meeting held on 1 October 14**
	Corporate Bond Matrix: The monthly spread matrix for October 2014 was discussed and approved by members.
39	**For the month of August -meeting held on 30 August 14**
	Corporate Bond Matrix: It was informed to the members that as discussed and decided in the last valuation committee meeting, the following fixed spreads were considered for the securities rated A+, AA-, BB+,BBB and BBB-. The monthly matrix for September 2014 prepared accordingly was discussed and approved by members.

SPREADS OVER AA- FOR BONDS RATED BELOW AA-

RATING	FIMMDA Spreads As EXISTING on 31/07/2014	RECOMMENDED SPREADS IN THE MEETING w.e.f 31/08/2014
AA-	As arrived at the end of each month (As of 31-07-2014: 111)	
-------- Add following spreads to AA- Spreads ---		
A+	25	25
A	55	50
A-	90	75
BBB+	130	100
BBB	175	125
BBB-	225	150

Valuation of Tax Free Bonds: The valuation methodology adopted/to be adopted for tax free bonds was discussed in detail. 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. 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 assesse 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.

Earlier, we circulated to all members that on 30.05.2014, Income Tax Appellate Tribunal, Pune passed an order, the gist of the which is as under:

- Capital and reserves are owned funds which are considered as interest free funds generated or available with the bank.
- 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.
- 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.
- 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.
- The condition is that the interest free own funds should be in excess of the investments made in tax free bonds.
- 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 judgement 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.

State Bank of India told that they have started maintaining separate books of accounts and getting them audited to prove that their investments in tax free bonds are out of their owned funds.

For such banks 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 as explained earlier.

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

Two members were of the opinion that we should not mix up tax issues for the valuation of tax free bonds and the valuation should be purely based on the traded levels and they suggested to have a separate spread matrix for tax free bonds. Other members did not accept this suggestion for the following reasons:

1) The traded prices will reflect the level at which the counterparties are comfortable and that level will vary from entity to entity depending upon their tax slab.
2) We cannot ignore the tax benefit embedded in the tax free bond since the Government has issued guidelines to the PSU issuers to fix coupon 50-75 bps less for the tax free bonds as compared to the taxable bonds issued by the same issuer.
3) Banks are investing in tax free bonds to get the tax benefits.
4) Some banks are even subscribing to the entire issue size in the primary market and holding with them only to preempt other players to get hold of the bonds and trade at a low level affecting the valuation of other holders who are in higher tax brackets and have purchased the bonds after seeing value in the tax free bond.

It was finally decided that as per the view of the majority in the valuation committee, the present methodology of valuing the tax free bonds by grossing up the coupon based on the

tax rate applicable to individual investor should continue for the reasons mentioned as above. We shall also inform RBI, DBOD accordingly as a response to their query.

Bond price calculator appearing on FIMMDA website: :Long back, in a valuation committee meeting, it was decided to use yield of residual tenor of the bond for discounting the cash flows as the formula in the calculator that FIMMDA provides on the website. But it was found that the calculator on the website still uses zero coupon yields for discounting the cash flows. So, it was decided to change the formula in the calculator to "yield of residual maturity of the bond" for discounting cash flows. It was also revealed that most of the banks use the same method.

40	**For the month of July - meeting held on 01 August 14**
	Corporate Bond Matrix: The Monthly matrix for August 2014 was discussed and approved by members.

Corporate Bond Matrix: The Monthly matrix for August 2014 was discussed and approved by members.

Discussion with regards to bond rated below AA- : There are 6 ratings till BBB-.
Presently, for bonds rated below AA-, a fixed spread is added to the AA- spread (segment wise) to arrive at the spread for the bond concerned. The spreads have been in vogue since a long time.

In the Report of the Committee on Financial Benchmark, a mention was made of the valuation of Corporate Bonds below AA- rating [(4.11.2/4.11.3 (iii)] and to consider polling for the above purpose. But, data for the period 2013-14 (F-TRAC) indicated that the number of bonds traded below AA- was very less and the percentage / volume of bond traded by banks / PD's is still very small. So, it may be difficult for Banks / PDs to poll on a regular basis. So, in the Valuation Committee held on 1st July, 2014 a committee consisting of Central Bank of India, ICICI Bank, Bank of Baroda, Punjab National Bank, YES Bank and ANZ Bank was formed to examine the possibilities of changing the fixed spread for the bonds rated below AA-

The committee met on 16th July, 2014 and examined the fixing of spreads on the basis of :
1) Banks spreads for lending to entities below AA- on the basis of their internal rating.
2) Spreads observed for traded bonds
3) Polling by Banks on the basis of their expert judgment / perception of such bonds keeping in view the traded level.

Accordingly data were collected by the members and the same was analyzed by FIMMDA. Polls were also received from banks.

Discussion took place on the basis of the following data:
   a) Analysis of traded spreads of bonds rated below AA- done by FIMMDA from F-TRAC data.
   b) Analysis of polled spreads for the bonds rated below AA- (polled by 8 banks). The polls from ICICI Bank were received after the stipulated time so were not considered for calculation of spreads (after considering ICICI Bank's polls - in all 9 banks polled)
   c) Analysis of credit spreads of banks collated and refined on the basis of banks internal rating vis-à-vis external rating.

RATING	FIMMDA Spreads As EXISTING on 30/06/2014	(Jan-14 to March-14) TRADED	July 2014 POLLS	As per Banks Website CREDIT SPREADS	RECOMMENDED SPREADS IN THE MEETING
		SPREADS OVER AA- FOR BONDS RATED BELOW AA-			
AA-		As arrived at the end of each month (As of 30-06-2014: 111)			
-------- Add following spreads to AA- Spreads --------					
A+	25	89	27	31	25
A	55	31	51	58	50
A-	90	71	73	124	75
BBB+	130	64	101	143	100
BBB	175		127	98	125
BBB-	225		159	162	150

The matrix approved by Valuation Committee members will be valid for next 3 month end valuation (31.08.14, 30.09.2014 and 31.10.14).

An attempt will be made if the same can be replaced by traded spreads subject to improvement in the trade volumes in those bonds (Below AA- & up to BBB-) in the intervening period. An analysis and discussion will be made once again in October 2014 to arrive at a decision for the future course of action.

41	**For the month of June - meeting held on 1 July 14**
	Corporate Bond Matrix: The matrix was discussed and approved by members. Presently, for bonds rated below AA-, a fixed spread is added to the AA- spread (segment wise) to arrive at the spread for the bond concerned. A committee consisting of Central Bank of India, ICICI Bank, Bank of Baroda, Punjab National Bank, YES Bank and ANZ Bank will examine the possibilities of changing the fixed spread on the basis of traded bonds in those ratings.
42	**For the month of May - meeting held on 31 May 14**
	Corporate Bond Matrix: The matrix was discussed and approved by the members. The members who were sending their polls every fortnight were requested to send the polls on daily basis to M/s Fact Entry so that our daily valuation (being displayed on trial basis) may be refined. (The Corporate Bond Matrix is uploaded on FIMMDA's website.
43	**For the month of April - meeting held on 2 May 14**
	Corporate Bond Matrix: The matrix was discussed and approved by the members. The Members who were sending their polls every fortnight were requested to send the polls on daily basis to M/s Fact Entry so that our daily valuation (being displayed on trial basis) may be refined. (The Corporate Bond Matrix is uploaded on FIMMDA's website).
44	**For the month of March -meeting held on 29 March 14**
	Corporate Bond Matrix: The matrix was approved by the members. The members who were sending their polls every fortnight were requested to send the polls on daily basis to M/s Fact Entry so that our daily valuation (being displayed on trial basis) may be refined.
45	**For the month of November -meeting held on 30 Nov 13**

	Valuation Of Bonds issued by State Power Distribution Companies (DISCOMs) under Financial Restructuring Plan: In respect of the minutes pertaining to decision taken during the valuation committee meeting held on November 1, 2013, on the captioned subject, it was clarified as under: 1. The specified initial period of the bonds issued by all Discoms under FRP will be taken as 5 years for valuation and other maturity based calculations. 2. The Discom bonds issued under FRP which are unrated and unlisted will be outside the purview of 10% limit stipulated by RBI for investing in unrated/unlisted bonds as per para. 16.4 of RBI Master Circular dated July 1, 2013 on IRAC norms on Advances.
46	**For the month of October -meeting held on 1st November 13**
	Valuation Of Bonds issued by Rajasthan State Power Distribution Companies (DISCOMs) under Financial Restructuring Plan: The Committee discussed on the valuation of Bonds issued by Rajasthan DISCOMs as referred to by Andhra Bank. The Members of the Valuation Committee decided that the actual tenor mentioned in the bond (5 years in case of Rajasthan DISCOM bonds) will be considered as the original maturity period of bonds and accordingly the G-sec yield for residual maturity period with a mark-up of 75 bps/100 bps will be taken for Valuation Purposes as per RBI circular No.: DBOD.BP.BC.No.105 /21.04.132/2012-13 dated 27th June, 2013. However, the members also stated that ratings and listings are not available for these DISCOMs bonds and as the banks are compelled to buy these unrated bonds the same should be kept outside the purview of 10% limit stipulated by RBI for investing in unrated/unlisted bonds. It was decided that FIMMDA should take up this matter with RBI and get the desired exemption.
47	**For the month of September - meeting held on 1 October 13**
	Corporate Bond : It was reiterated that as clarified in Circular No. FIMCIR/2013-14/30 dated September 23, 2013 the 15 Days Prior (as per the Para 3.7.1 RBI Master Circular) is 15 Calendar Days only. The Committee decided the Filter Criteria for the Recognition of Price for Last 15 days. 1. The minimum number of Trades for recognition of prices of last 15 days Cumulative Corporate Bond Spreads will be 1 and Volume will be Minimum Rs. 5 crore. 2. If Corporate Bonds are traded below the G-Sec Par yield or have a negative spread, such Corporate Bond trades will not be published and considered for Price Recognition. 3. Tax Free Corporate Bond will be considered even, if they are traded below the G-Sec Par Yield. 4. Corporate Bonds that do not fulfill above mentioned criteria for price recognition will be valued by the Matrix Spread which is uploaded by FIMMDA every month.
48	**For the month of July -meeting held on 1-Aug-13**
	Discussion on PTC Securitized paper 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.

> In terms of FIMMDA Circular FIMCIR/2012-13/41 dated March 1, 2013 on Valuation of Investments as on 31st March 2013, for valuation of Tax free bonds and Preference shares the coupon will be grossed up by a factor equal to the income tax rate applicable for the holder.
>
> In the light of above, we are of the view that the valuation methodology for PTC's can be treated at par with tax free bonds and suitable instructions in this regards may be issued.

Axis Bank paper was discussed and members observed that in view of the specific tax section quoted, the valuation of PTC bonds may be done similar to a tax free bond.

49	**For the month of March -meeting held on 30-Mar-13**
	Identification of "Most Liquid" (minimum 5 trades & Rs.25 Crores) Securities for Corporate Bonds for the month of April 2013: The committee went through the traded data for the month of March, 2013 and selected the following Corporate Bonds as Most Liquid(ML) for the month of March, 2013.It was decided that hence forth ML for the tenor 2,3,5,7,10, & 15 years only will be notified by FIMMDA in the segment subject to passing the criteria. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs.25 Crores and 5 trades with Tenor in the previous month. The identified benchmarks are as listed in the minutes.
50	**For the month of February - meeting held on 1 March 13**
	Identification of "Most Liquid" (minimum 5 trades & Rs.25 Crores) Securities for Corporate Bonds for the month of March 2013: The committee went through the traded data for the month of February, 2013 and selected the following Corporate Bonds as Most Liquid(ML) for the month of March, 2013.It was decided that hence forth ML for the tenor 2,3,5,7,10, & 15 years only will be notified by FIMMDA in the segment subject to passing the criteria. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs.25 Crores and 5 trades with Tenor in the previous month. The identified benchmarks are as listed in the minutes. Month-End Corporate Bond Spread Matrix: The committee was informed that with effect from 1st April, 2013 FactEnrty Spread Matrix provided for month end valuations and CRISIL Matrix will be discontinued. However, Average Trades Spreads of Corporate Bonds over FIMMDA-PDAI Gilt Curve are also being put on website on daily basis.
51	**For the month of December - meeting held on 01 January 13**
	Identification of Benchmark Securities for Corporate Bonds for the month of January 2013: The committee went through the traded data for the month of December, 2012 and selected the following Corporate Bonds as Benchmark for the month of January, 2013. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades in the previous month. The identified benchmarks are as listed in the minutes. Discussion on Valuation of Structured Bonds: ICICI Bank has sent a note on the Valuation of the above bonds. We have copied their mail to all the participants for their views for discussion in the next valuation meeting.
52	**For the month of November - meeting held on 01 December 12**

	Identification of Benchmark Securities for Corporate Bonds for the month of December 2012: The committee went through the traded data for the month of November, 2012 and selected the following Corporate Bonds as Benchmark for the month of December, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades in the previous month. The identified benchmarks for the month of August 2012 are as listed in the minutes. Discussion on Valuation of Unrated Preference Shares and Securities: On earlier mail address to Corporate bond dealers for an opinion did not get any response. So, it was decided to seek opinion of member bank before arriving at a decision.
53	**For the month of October - meeting held on 01 November 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of November 2012: The committee went through the traded data for the month of October, 2012 and selected the following benchmarks for Corporate Bonds for the month of November, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of November 2012 are as listed in the minutes. Discussion on the Comparison of Cumulative Corporate Bond spreads for 15 trading days: It was discussed in the meeting that Cumulative Corporate Bond spreads for 15 trading days will be uploaded after Month End meeting. FIMMDA would upload a Corporate Bond "traded data" sheet for all bond traded as on Month-end date and 15 days prior thereto. This "traded-data" could be used for Level 1 valuation of Corporate Bonds. However, since there could be misreporting of yields, members were requested to get back to FIMMDA with errors if any, so that this Level 1 valuation could be cleaned and finalized before 31st March, 2013.
54	**For the month of September - meeting held on 29 September 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of October 2012: The committee went through the traded data for the month of September, 2012 and selected the following benchmarks for Corporate Bonds for the month of October, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of October 2012 are as listed in the minutes. Parameters for Fixing 0.5 Years Maturity in Corporate Bonds: It was decided in the meeting that bonds with residual maturity of less than three months even if traded will be ignored. Traded bonds with residual maturity of four to eight months will be taken for the construction of matrix. If there are no trades in the above mentioned category, or if the spread is higher than that for one year, then one year spread will be repeated for 0.5 category. Valuation of Corporate Bonds Spread Matrix: The spreads of CRISIL and FACT ENTRY were discussed and it was decided to continue observing both the values for some more time till refinement is brought about in Fact Entry Matrix. The valuation will be done as per the CRISIL Matrix (uploaded in Month-End file) till such time.
55	**For the month of August - meeting held on 1 September 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of September 2012: The committee went through the traded data for the month of August, 2012 and

selected the following benchmarks for Corporate Bonds for the month of September, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of September 2012 are as listed in the minutes.

Corporate Bond Matrix prepared by Fact Entry (FE): It was decided that since there are no trades in Banks and Corporates in 0.5 Tenor Category, the average of the traded spreads of PSU&FI's and NBFC will be taken for arriving at 0.5 category spreads.
It was also decided by the Valuation Committee that Fact Entry spreads will be displayed on daily basis on the website, and CRISIL spread on monthly basis till 1st October, 2012 after which only Fact Entry spread will be published.

56	**For the month of August - meeting held on 1 September 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of August 2012: The committee went through the traded data for the month of July, 2012 and selected the following benchmarks for Corporate Bonds for the month of August, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of August 2012 are as listed in the minutes._

Corporate Bond Matrix prepared by Fact Entry (FE): The members compared the CB matrix with that prepared by CRISIL. The general opinion was that the matrix prepared by Fact Entry was more realistic.
As the daily matrix up to BBB is required by Insurance companies for the valuation of their Unit linked Insurance Products, FIMMDA shall start displaying FE Matrix on daily basis on the website. Members were requested to revert with any discrepancy that they may notice to enable us to fine tune the FE Corporate Bond matrix. |
57	**For the month of June - meeting held on 30 June 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of July 2012: The committee went through the traded data for the month of June, 2012 and selected the following benchmarks for Corporate Bonds for the month of July, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of July 2012 are as listed in the minutes.
58	**For the month of May - meeting held on 01 June 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of June 2012: The committee went through the traded data for the month of May, 2012 and selected the following benchmarks for Corporate Bonds for the month of June, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of June 2012 are listed in the minutes.
59	**For the month of April - meeting held on 02 May 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of May 2012: The committee went through the traded data for the month of April, 2012 and selected the following benchmarks for Corporate Bonds for the month of May, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25

	Crores and 5 trades every month. The identified benchmarks for the month of May 2012 are listed in the minutes. Discussion on the Method of Valuation of Securities carved out of Corporate Debt Restructuring (CDR): A letter received from State Bank of Patiala dated 11th April 2012 was discussed regarding the valuation of securities carved out of CDR. SBP required clarification on the setting–off of depreciation/appreciation on Preference Shares/Equity Shares received by the Bank out of conversion of CRD loans that are available out of Banks' AFS portfolio. It was advised that the issue should be directly sorted out by approaching RBI's Department of Banking Operations and Development (DBOD) for the above clarification.
60	**For the month of Mar - meeting held on 31 March 12**
	Identification of Benchmark Securities for Corporate Bonds for the month of April 2012: The committee went through the traded data for the month of March, 2012 and selected the following benchmarks for Corporate Bonds for the month of April, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of April 2012 are listed in the minutes.
61	**For the month of February -meeting held on 1-Mar-12**
	Identification of Benchmark Securities for Corporate Bonds for the month of March 2012: The committee went through the traded data for the month of February, 2012 and selected the following benchmarks for Corporate Bonds for the month of March, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of March 2012 are listed in the minutes.
62	**For the month of January -meeting held on 1-Feb-12**
	Identification of Benchmark Securities for Corporate Bonds for the month of February 2012: The committee went through the traded data for the month of January, 2012 and selected the following benchmarks for Corporate Bonds for the month of February, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of February 2012 are listed in the minutes. Discussion on the F-TRAC Counter-party Issue of Double Reporting: While the committee discussed the daily volumes in Corporate Bond markets, it was observed that there may be a case of double reporting on F-TRAC and Clearing Corporation of Exchanges. This is because of the following reasons: 1. RBI regulated entities report their trades to FIMMDA 2. Non RBI regulated entities trading with RBI regulated entities have to compulsory settle through the clearing corporation of exchanges. 3. Thus in such a case, the RBI regulated entity reports twice. Once to FIMMDA and once to the clearing corporation for settlement. The above could be avoided if all entities register with FIMMDA as this would also provide ease of settlement through the STP solution and be better for market transparency. Thus, the committee decided that the members would inform all non-members to register with FIMMDA's Platform F-TRAC to avoid the problem of Double Reporting.

	Corporate bond REPO: The CEO informed the committee about FIMMDA's bimonthly meeting with RBI on January 23, 2012 wherein the RBI asked FIMMDA about the reasons for the lack of liquidity in the Corporate Bond Repo market. The Valuation committee members responded that the lack of liquidity is due to lack of participation from other non-banking market participants who are generally active in the G Sec repo market. Also the margining requirements may make the funding rate for corporate bond repo trades unviable as banks can borrow at lower rates in the interbank uncollateralized market. CDS: In the bimonthly meeting between RBI and FIMMDA held on 23rd January 2012 the RBI wanted a response on the level of preparedness of the market in participating in the CDS market. All members were requested to send their feedback by February 9, 2012.
63	**For the month of December - meeting held on 31 December 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of January 2012: The committee went through the traded data for the month of December, 2011 and selected the following benchmarks for Corporate Bonds for the month of January, 2012. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of January 2012 are listed in the minutes. Valuation of Callable Bonds: A query was raised by HDFC Bank in relation to Valuation of Bonds with Call/Put options. FIMMDA Valuation guidelines say that bonds with Call options need to be valued on Yield to Worst basis. As per the Bank's query, highest yield may not lead to the lowest price. They wanted to confirm whether, in such a situation, the price given by the highest yield be considered or should the bond be valued at the yield that gives the worst (lowest price). FIMMDA clarified that the idea behind using Yield to Worst basis is to follow a conservative valuation methodology and thus, a yield that gives the worst (lowest) price (call option date or maturity date), should be used. Valuation of Compulsorily Convertible Debentures: Another query raised by HDFC Bank was regarding the maturity date to be used in the valuation of Compulsorily Convertible Debentures. FIMMDA confirmed that the conversion date of Compulsorily Convertible Debentures is to be taken as the maturity date for calculations. HDFC bank also came forth with a query on valuation of SDLs on the month end. They stated that month end valuation of SDLs at their end is being done with month end date as the valuation date, whereas FIMMDA valuation is being done on a T+1 basis and thus needed clarification on the same. FIMMDA clarified saying that all SDL valuations being done using FIMMDA published curves need to be done on a T+1 basis.
64	**For the month of November - meeting held on 1 December 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of December 2011: The committee went through the traded data for the month of November, 2011 and selected the following benchmarks for Corporate Bonds for the month of December, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of December 2011 are listed in the minutes.
65	**For the month of October - meeting held on 1 November 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of November 2011: The committee went through the traded data for the month of October, 2011 and

selected the following benchmarks for Corporate Bonds for the month of November, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of November 2011 are listed in the minutes.

Method to be used for Amortization of CPs: It was clarified that the market participants can use any of the amortization methods, i.e. straight line method or discounted price method as FIMMDA does not prescribe any particular method. The method used should be uniform and mentioned in the individual Bank's Principal Accounting Policy.

66	**For the month of September - meeting held on 30 September 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of October 2011: The committee went through the traded data for the month of September, 2011 and selected the following benchmarks for Corporate Bonds for the month of October, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of October 2011 are listed in the minutes.
67	**For the month of August - meeting held on 2 September 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of September 2011: The committee went through the traded data for the month of August, 2011 and selected the following benchmarks for Corporate Bonds for the month of September, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of September 2011 are listed in the minutes.
68	**For the month of July - meeting held on 1 August 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of August 2011: The committee went through the traded data for the month of July, 2011 and selected the following benchmarks for Corporate Bonds for the month of August, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of July 2011 are listed in the minutes.
69	**For the month of June - meeting held on 1 July 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of July 2011: The committee went through the traded data for the month of June, 2011 and selected the following benchmarks for Corporate Bonds for the month of July, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of September 2011 are listed in the minutes.
70	**For the month of May - meeting held on 1 June 11**
	Identification of Benchmark Securities for Corporate Bonds for the month of June 2011: The committee went through the traded data for the month of May, 2011 and selected the following benchmarks for Corporate Bonds for the month of June, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of September 2011 are listed in the minutes.

	<u>Valuation methodology for CDS</u>: The revised valuation methodology for CDS as discussed by the Core product development committee for CDS was presented to the valuation committee, for information.
71	**For the month of April - meeting held on 2 May 11**
	<u>Identification of Benchmark Securities for Corporate Bonds for the month of May 2011:</u> The committee went through the traded data for the month of April, 2011 and selected the following benchmarks for Corporate Bonds for the month of May, 2011. The minimum criteria for the benchmark securities have been kept as the total traded value of Rs. 25 Crores and 5 trades every month. The identified benchmarks for the month of September 2011 are listed in the minutes. <u>Valuation of preference shares:</u> A query was raised by yes bank for the valuation treatment of premium received on redemption of preference shares. The committee has requested Yes bank to provide a detailed working of the process suggested, to enable FIMMDA to seek approval from RBI. <u>Valuation methodology for CDS:</u> The proposed valuation methodology for CDS as discussed by the Core product development committee for CDS was presented to the valuation committee, and explained.