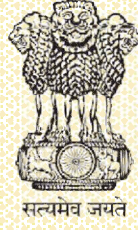
राष्ट्रीय वित्तीय रिपोर्टिंग प्राधिकरण

NATIONAL FINANCIAL REPORTING AUTHORITY

REPORT ON VALUATION METHODOLOGY OF AT-1 BONDS



Report by the National Financial Reporting Authority on valuation methodology of AT-1 bonds

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Introduction

Ministry of Corporate Affairs (MCA), Government of India, vide their letter dated 12.01.2024 had referred a proposal of Department of Economic Affairs (DEA), Ministry of Finance to National Financial Reporting Authority (NFRA) for their deliberation and recommendation on the methodology for valuation of AT-1 bonds. Along with the letter, the MCA also shared a copy of the minutes of the 2nd meeting of the Committee constituted under the chairmanship of Secretary, DEA, on this subject.

2. NFRA, while finalising this report, has kept in mind the underlying rationale of the reference being the Authority's remit under the Companies Act 2013 (hereinafter referred to as the Act). Section 132(2) of the Act reads as -, '*to recommend accounting and auditing policies and standards to be adopted by companies for approval by the Central Government and to monitor and enforce compliance with accounting standards and auditing standards etc.'*.

3. Detailed notes, background papers, and minutes of the meetings of the Committee chaired by Secretary, DEA, were shared with the Authority. The views of the experts and market participants were called for and deliberated upon. The Authority held two meetings, the first on 20 February 2024 and the second on 28 March 2024.

Background on AT-1 bonds

4. At the outset, the Authority took note of the features of AT-1 bonds, the extant guidelines and circulars issued on the same. These are summarised below:

a. Reserve Bank of India (RBI) permits banks to issue AT-1 bonds which are perpetual debt instruments with loss absorption features, in conformity with Basel III capital adequacy norms. AT-1 bonds carry a higher coupon rate on account of associated risk and are an important source of quasi-equity capital for Banks globally (details on features of AT-1 bonds are in Annexure 1). Investors in such Bonds include Mutual Funds, Corporates and other institutional investors.

b. Securities & Exchange Board of India (SEBI) had issued the following guidelines on Perpetual Bonds with Call option from time to time as summarised below.

   i. SEBI (Mutual Fund) Regulations 1996 in its Eighth Schedule states that the valuation of investments shall be based on the principles of fair valuation.

   ii. SEBI's guidelines for valuation of securities for mutual funds contained in the circular dated September 18, 2000, require that:
      - Securities with call option be valued at the lower of the value obtained by valuing the security to final maturity (YTM) and valuing the security to call option, and
      - In case there are multiple call options, the lowest value obtained by valuing to the various call dates and valuing to the maturity date is to be taken as the value of the instrument.

The present issue regarding valuation of AT-1 bonds

5. The present issue stems from a circular dated 10 March 2021, issued by SEBI, which stipulated prudential investment limits for mutual funds for AT-1 bonds, and valuation of bonds to be in line with the SEBI circular No. MRD/CIR/8/92/2000 dated September 18, 2000, irrespective of the nature of issuer. In addition, the circular stipulated the maturity of all perpetual bonds to be treated as 100 years from the date of issuance of the bond for the purpose of valuation.

a. In response to the above-mentioned circular, SEBI received representations from various stakeholders. Consequently, SEBI provided a time-line or glide path for the implementation of the valuation norm laid down in its circular dated 22 March 2021. According to this circular, the deemed residual maturity of AT-1 bonds for valuation purposes to be adopted by mutual funds was to be:

   i. 10 years up till March 31, 2022;
   ii. 20 year s between April 01, 2022, and September 30, 2022;
   iii. 30 years between October 01, 2022, and March 31, 2023; and
   iv. 100 years from April 01, 2023.

b. Pursuant to SEBI's circular dated 22 March 2021, Association of Mutual Funds in India (AMFI) issued Best Practices Guidelines on 24 March 2021 for valuation of AT-1 Basel III bonds.

c. RBI and the Indian Banks' Association (IBA) expressed concerns in respect of the circulars issued by SEBI in March 2021. These were premised on the following grounds:

   i. The Domestic and International Practice indicated a valuation of AT-1 bonds on 'Yield to First Call (YFC)' basis and therefore, the requirement to value these bonds on a 100-year basis, was not in consonance with the market practice.

   ii. There was a need to make Domestic Bond Markets strong and vibrant, but the SEBI circular did not serve this need. In fact, it was pointed out that post the valuation methodology issued by SEBI, some Indian Banks had resorted to issuance of such Bonds in the overseas market, leading to shrinkage of the domestic market for AT-1 bonds.

   iii. The new valuation methodology had adversely affected the participation of Mutual Funds, a key investor segment, in AT-1 Bonds Market and the appetite of other category investors such as Corporates, Insurers, PF and Pension Funds was likely to get severely reduced thereby effectively shutting down the market for such instruments.

d. SEBI's view in the matter has been that AT-1 bonds are perpetual in nature and the market perception of their maturity being of only up to the first call, usually 5 years (based on which the price of AT-1 bonds was being determined), may be detrimental under adverse cases when the bonds may not be called on the due date. SEBI observed that the market on its own had started valuing AT-1 bonds (despite being perpetual bonds) at 5 years, calling for an intervention on the part of SEBI. Since in approximately 85-90% of instances the valuation of AT-1 bonds was happening at mark-to-market, SEBI was of the view that their circulars would not affect the valuation of AT-1 bonds. Under the SEBI prescribed waterfall mechanism for valuation of bonds (including AT-1 bonds), the traded yields of AT-1 bonds are to be given

primacy for the purpose of valuation. If traded yields are not available, as per the laid down waterfall mechanism, the valuation of bonds is to be derived from the yield of industry level benchmark security.

e. The Authority was apprised of RBI Master Directions/Circulars, FBIL[1] and FIMMDA[2] and IRDAI[3] Guidelines as relevant to the issue on fair value measurement of investments.

f. In case of Banks, valuation of Investment Portfolios is based on the Master Directions/Circulars issued by the RBI. Chapter 1 of the RBI Master Direction[4] has definitions of various key terms including those relevant for fair value measurement for investments, where prescribed. It was noted that the definitions of these terms were broadly in line with those in the Indian Accounting Standard (Ind AS) 113 relating to *Fair Value Measurement*. Chapter VIII of the above referred Master Direction lays down prescriptions regarding determination of fair values for the purpose of initial recognition and subsequent measurement i.e., periodical valuation of investments. The Master Direction, inter alia, requires use of quoted prices declared by the FBIL and/or FIMMDA as fair values.

g. The FIMMDA circular dated 30.03.2022 specifically prescribes that the fair value determination methodology for AT-1 Perpetual Bonds shall be on 'Yield to First Call' basis. This circular also prescribes that for other perpetual bonds, the price for all option dates till the longest point on the base yield curve is to be calculated and the lowest price is taken as value of the bond.

h. It was also noted that the IRDAI Master Circular[5] dated 27.10.2022 addresses accounting and valuation aspects of investment portfolio of Insurance Entities. In respect of investment in AT-1 bonds and Tier II Bonds, the Master Circular states that valuation shall be as per the directions issued by SEBI for Mutual Funds from time to time.

i. NFRA noted that the market for AT-1 bonds includes a large investor base which involves Banks, Mutual Funds, Individuals, Pension Funds, Provident & Gratuity trusts/ funds, Insurers, NBFCs, Corporates, Government and Others and the valuation of such bonds may have wide ramifications.

Fair Value Measurement- Consideration of the Standards and underlying principles

6. Since various regulators require the valuation of investments based on fair value, the Authority considered it relevant and essential to follow the Principles and Concept of Fair Value Measurement in the Financial Reporting Framework applicable for General Purpose Financial Statements.

7. Valuation of Financial Instruments such as Bonds, Debentures and Equity Instruments is an important and material accounting matter in the broader area of financial reporting frameworks. In the financial reporting frameworks, valuation is generally referred to as 'Measurement Basis' and two categories of measurement bases viz., Historical Cost and Current Value are recognised by the Conceptual Framework[6].

8. In the former category, amortised cost is the commonly used measurement approach; and in the latter category, Fair Value[7], Value-in-Use for Assets, Fulfilment Value for Liabilities, and Current Costs are the common

[1] Financial Benchmarks India Private Ltd.
[2] Fixed Income Money Market and Derivatives Association of India
[3] Insurance Regulatory and Development Authority of India
[4] RBI/DOR/2023-24/104 DOR.MRG.36/21.04.141/2023-24 effective for accounting period commencing on or after April 1,2024
[5] IRDA/F&I/CIR/INV/226/10/2022, Investments – Master Circular- IRDAI (Investment) Regulations 2016
[6] Refer Chapter 6 of Conceptual Framework for Financial Reporting under Indian Accounting Standards (Ind AS)
[7] Fair value as per Ind AS 113 is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

approaches. It is important to note that specific individual accounting standards prescribe specific principles and detailed guidelines as to when and how to apply these different measurement bases to various assets and liabilities. In view of the wider relevance and application of fair value in the financial reporting, there is a specific and comprehensive Indian Accounting Standard viz., Ind AS 113[8] as a single source of Fair Value Measurement Principles and related guidance. Ind AS 113 is based on high-quality globally accepted International Financial Reporting Standard (IFRS) viz., IFRS 13.

9. Certain key features of Fair Value Measurement principles in Ind AS 113 state that Fair Value is a market-based measurement reflecting the perspective of market participants in an orderly market transaction. Fair value measurement under Ind AS 113 can be broadly categorised into two types viz., Quoted Price in Active Markets (Level 1 Fair Value Hierarchy) and Valuation Techniques (Level 2 & 3 Fair Value Hierarchies).

10. As per Ind AS 113, Fair Value is based on the 'assumption' that the asset or liability is exchanged in an orderly transaction between market participants. An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, as if market participants act in their economic best interest. Even when the Fair Value is determined using valuation techniques, the methodology to be used has to be based on valuation assumptions or approaches generally used by market participants.

Issue for consideration as determined by the Authority

11. The main issue before the Authority is to suggest a methodology for valuation of AT-1 bonds, which would be in sync with Ind AS 113. The fair value principles of Ind AS require determination of valuation assumptions or approaches generally used by the market participants.

Fair Value Measurement- Consultation with market experts

12. The Authority, therefore, consulted various experts and expert bodies on the practices followed by them in market-based measurement and the assumptions/techniques used by them. NFRA specifically sought their views on various aspects related to valuation of AT-1 bonds, namely, clarification based on tenor to be used, trigger for applying the YTM basis for valuation, factors considered by traders in valuing or pricing these AT-1 bonds, and international practice in valuation of these bonds.

13. The Authority noted the responses by FIMMDA, AMFI, CRISIL, ICRA Analytics, Care Edge ratings, India Ratings and ICICI Mutual Funds which are placed at Annexure 5. The subject matter experts also presented their views during the first meeting of the Authority held on 20.02.2024 via on-line video call or in-person. Their responses are placed at Annexure 2. Majority of the experts and market participants expressed the view that AT-1 bonds are traded on YTC basis.

14. NFRA also requested views of RBI on the subject including their guidance to banks regarding exercise/non-exercise of the call options on the AT-1 bonds. Their views along with those of the IBBI are placed at Annexure 3. After the Authority meeting held on 20 February 2024, RBI also suggested that in cases when the AT-1 bond is either thinly or not traded, G-sec yield of appropriate maturity (call date) may be considered as an initial benchmark and then appropriate spread may be applied to arrive at a fair valuation.

[8] Indian Accounting Standard (Ind AS) 113, *Fair Value Measurement*

Understanding Live markets on bond trades

15. In order to test the view of most of the market participants that the bonds are traded on a YTC basis, the Authority reviewed live global market trades of AT-1 bonds, during its meeting on 20.02.24. This was facilitated by Treasury Officers of the State Bank of India, through a live demonstration on the Bloomberg terminal.

16. The officers from SBI demonstrated three trading screens relating to AT-1 bonds (i) All Quotes, (ii) Yield and Spread Analysis – YTC and (iii) Yield and Spread Analysis – YTM. The screen shots are placed at Annexure 4.

17. The first screen displays the Bid and Ask Prices[9] quoted (demanded) by the traders and prices as traded. It also displays the Bid and Ask Yields along-side the Bid and Ask Prices quoted by the Traders. The yields as per YTC and YTM for these concluded trades were visible on the Yield and Spread Analysis screen. Thus, the yields displayed on the traded prices could be compared with YTC and YTM displayed in Yield and Spread Analysis.

18. On making such a comparison, it was found that in most cases the Bid and Ask Yields displayed next to Bid and Ask Prices were closer to the YTC on Yield and Spread Analysis. This clearly showed that the market respects a valuation based on yield to call.

19. The exercise covered examination of trades for three days, viz., -14th, 15th, and 16th February 2024 in respect of 31 AT-1 bonds chosen as a sample. The trades indicated that in the global bond market, the AT-1 bonds are traded/quoted on YTC basis in a large majority of cases. These findings are detailed in the Table 1 below.

Table 1: Comparative Summary of Yields displayed on Bloomberg Terminal on YTC, YTM or Middle Range basis

Number of cases in which quoted Bid & Ask Yields are closer to:	14.02.2024		15.02.2024		16.02.2024	
	Bid	Ask	Bid	Ask	Bid	Ask
YTC	22	25	22	24	25	27
YTM	5	2	4	3	5	2
Middle Range	4	4	5	4	1	2
Total	31	31	31	31	31	31

Source: Based on Bloomberg Terminal data

[9] Bid and Ask (Offer) price refers to the price at which the trader is willing to buy and sell the securities, respectively.

Conclusions of the Authority on valuation of AT-1 bonds

20. The Authority noted that the theme underpinning the fair value measurement in Ind AS 113 is a market-based measurement considering the traded/quoted prices, data and information observed from the markets and the assumptions and practices of market participants. The Ind AS framework is based on the globally accepted IFRS Accounting Framework. Ind AS 113 specifically deals with fair value measurement of a variety of financial and non-financial items and is virtually the same as the international standard IFRS 13[10].

21. The Authority also noted that to increase consistency and comparability in fair value measurements and related disclosures, Ind AS 113 establishes a fair value hierarchy that categorises into three levels as follows:

a) Level 1 Inputs: Quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity can access on the measurement date. A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value whenever available, except in certain specified circumstances such as significant events taking place after the close of the market but before the measurement date.

b) Level 2 Inputs: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly e.g., interest rates or yield curves, credit spreads and implied volatilities.

c) Level 3 Inputs: Inputs that are unobservable inputs for the asset or liability. However, the objective of fair value measurement remains the same i.e., an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability.

Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

22. In view of the above discussions, the Authority concludes as following:

a. AT-1 bonds may be classified into two categories. The first category constitutes the AT-1 bonds which are traded actively[11]. The Authority is of the view that the trading prices constitute Level 1 inputs and the valuation in such cases based on traded prices will be consistent with Ind AS 113.

b. The second category constitutes the AT-1 bonds that are not actively traded or not traded. As observed in paragraphs 12-19 above the predominant market practice is to trade AT-1 bonds at prices closer to Yield to Call (YTC), therefore, valuation of this category of AT-1 bonds may also be based on Yield to Call (YTC).

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[10] IFRS 13 *Fair Value Measurement* was developed by the International Accounting Standards Board (IASB) of IFRS Foundation jointly with U.S. national standard-setter, the Financial Accounting Standards Board (FASB) as common requirements for measuring fair value and for disclosing information about fair value measurements in accordance with IFRSs and U.S. generally accepted accounting principles (GAAP) – Topic 820 (previously SFAS 157)

[11] An active market under Ind AS 113 is defined as 'A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis'

The Yield for these bonds may be estimated on the basis of YTM observed for appropriate G-Sec with residual maturity up to the AT-1 bond call date, and adjusted for factors which the market participants of AT-1 bonds normally consider. Such adjustments/risk spread could cover the price at which other comparable or closest AT-1 bonds/sectoral bonds are trading, liquidity of the AT-1 bond, risk perception, issuer bank's regulatory capital level, its credit rating, probability of call options being exercised, or the bond being written down wholly or partially, or being converted to equity etc. In cases of bonds that are not actively traded and not called, there is a probability that even if a bond is not called on a call date, it could still be called on one of the next call dates. Therefore, in such cases too, use of YTC based valuation with adjustment/risk spread as indicated above will be consistent with Ind AS 113.

23. The Authority also notes that instances where the call option is not exercised by banks are few and far between even though RBI Basel III guidelines require the banks (issuers) not to create any expectation of exercise of call option.

24. SEBI's concern that the YTC instead of YTM based valuation may be detrimental to investors in some cases, can be addressed by adding appropriate risk spread as detailed in paragraph 22 (b).

25. SEBI, vide its communication dated 22 March 2024 (SEBI note is included in Annexure 3 and 5), has also raised the issue of valuation of other perpetual bonds (non-AT-1) which are currently being valued on YTM basis with longer maturity and yield drawn from papers such as 50-year G-sec Bonds etc. In this regard, it is clarified that the MCA's reference to NFRA is only with respect to the valuation of AT-1 bonds and therefore we confine our recommendations only to these bonds.

26. SEBI in its above communication also expressed that the YTC method of valuation should not result in making the Call Date as deemed maturity date. In this context it is hereby clarified that our recommendation on YTC methodology is confined only to the interpretation of Ind AS 113 with reference to the valuation of AT-1 bonds. The issue of deemed maturity date for other purposes is outside NFRA's remit.

27. To conclude, it can be stated that since the market practice for AT-1 bonds has been observed to trade at or quote prices closer to Yield to Call (YTC) basis, therefore, valuation of AT-1 bonds on YTC basis (adjusted with appropriate risk spread as mentioned in para 22 (b)) will be consistent with the principles of market-based measurement under Ind AS 113. The guidelines and methodology for determining spreads in this regard may be issued, if deemed fit, by the market regulator concerned. In cases where banks do not or are not likely to exercise the call option, the market participants would factor in this event in their trading.

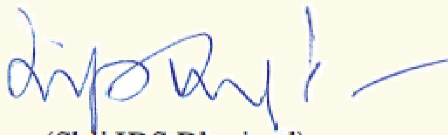
28. Since Ind AS 113 emphasises, valuation based on market practice, our recommendations too are based on the current market behaviour. Market behaviour, however, is dynamic. Hypothetically, it may happen that market practice becomes such that most AT-1 bonds are not called by the issuers. The market in that case may value these bonds at YTM or yield to worst. Therefore, it will be necessary to monitor market practice and see whether there is any change over time. It is therefore recommended that at least once in three years, the valuation

methodology may be revisited to consider for the changes in market practice, if any. This approach will be consistent with para 65 of Ind AS 113.

(Dr Ajay Bhushan Prasad Pandey)
Chairperson, NFRA

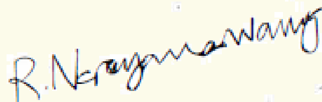
(Dr P K Tiwari)
Full-time Member, NFRA

(Ms Smita Jhingran)
Full-time Member, NFRA



(Shri IDS Dhariwal)
Joint Secretary, MCA
Part-time Member, NFRA

(Leave of absence)
(Ms Kavita Prasad)
Director General, O/o CAG of India
Part-time Member, NFRA

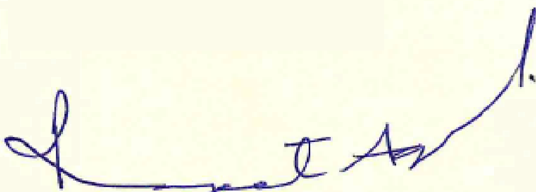


(Prof. R Narayanaswamy)
Retd Prof IIM, Bangalore
Part-time Member, NFRA

(Prof. Sanjay Kallapur)
ISB, Hyderabad
Part-time Member, NFRA

(Shri SV Murali Dhar Rao)
Executive Director, SEBI
Part-time Member, NFRA

(Ms Sudha Balakrishnan)
CFO, RBI
Part-time Member, NFRA



(Shri Ranjeet Kumar Agarwal)
President, ICAI
Part-time Member, NFRA

(Shri Sanjeev Kumar Singhal)
Chairman, AASB, ICAI
Part-time Member, NFRA

(Shri Pramod Jain)
Chairman, ASB, ICAI
Part-time Member, NFRA

Annexure 1
Features of AT-1 bonds

1. "AT-1 bonds" (perpetual debt instruments that may be issued as bonds or debentures by Indian banks as per RBI Master Circular-Basel III Capital Regulations), issued by the Banks in terms of Basel III Framework, have become an important source of quasi-equity capital for Banks globally. Investors in such Bonds include Mutual Funds, Corporates and other institutional investors.

2. RBI permits the issue of AT-1 bonds with loss absorption features in conformity with Basel III capital adequacy norms. Many public sector and private sector banks have issued Basel III-compliant AT-1 bonds in India and abroad. The number of issues made since 2015 exceed 100. Both professional and retail investors have invested in AT-1 bonds because of the higher coupon. AT-1 bonds have been a useful source of capital for banks in need of capital and a profitable asset class for investors looking for better returns.

3. Certain Unique Features of AT-1 bonds are as follows.
   a. There is no maturity date and there are no step-ups or other incentives to redeem.
   b. The interest payable to the investors may be either a fixed rate or a floating rate referenced to a market determined rupee interest benchmark rate. While the Bank must have full discretion to cancel coupon payments, the instrument cannot have a credit sensitive coupon feature i.e., a coupon that is reset periodically based in whole or part on the Banks' credit rating.
   c. Call Option only: The Banks may issue AT-1 bonds with call option which is permissible after the instrument has run for at least 5 years. However, exercise of call option is subject to prior approval of RBI and the Banks must not do anything which creates an expectation that the call will be exercised. However, the investor has no put option on the instrument (i.e. no right to sell). Consequently, AT-1 bonds carry a coupon higher than bank deposits to compensate for the higher risk.
   d. Loss Absorption Features; AT-1 bonds shall have a loss absorption feature which can be through either (i) conversion into equity shares or (ii) a write-down mechanism (temporary or permanent) which allocates losses to the instruments. As an inherent feature of these bonds, the issuer has full discretion to cancel coupon payments.

Annexure 2:
Summarised, issue-wise, expert views on various aspects related to AT-1 bonds

B. Views on tenor to be used

1. FIMMDA: Historically in Indian Markets the AT-1 bonds are priced on the Yield to Call (YTC) basis due to factors such as the high market standing and sound financials of the issuers of AT-1 bonds, they have always exercised the calls barring one or two instances and the YTC provides expected return should the bond be called by the issuer. Market practice is to price AT-1 bond using prevalent risk-free yield curves duly adjusted for the risks associated with these AT-1 bonds. Globally the predominant practice is to value them on YTC basis.

2. AMFI: In case of AT-1 bonds traded regularly, the traded price should be taken for the purpose of valuation. Since the AT-1 bonds get traded in terms of Yield to Call, the valuation of the AT-1 bonds should also be on Yield to Call basis. To corroborate their statement about the market practice and investor preference of pricing on YTC basis, AMFI provided two examples based on past secondary market data of trading of AT-1 bonds of SBI.

   In the first example the hypothesis tested is that if the deemed maturity tenor of 100 years (YTM basis) were used for trading, there should not be significant variation in the secondary market prices between AT-1 bond with 1 year to call option and the one with a 5-year call option. The secondary market data for 3-month period from December 2020 to February 2021 shows significant variation in the yields of these two AT-1 bonds resulting in hypothesis not testing true that the AT-1 bonds were traded on YTM basis.

   In the second example, the hypothesis tested is whether the AT-1 bonds with different coupon rates (fixed at the time of the initial issuance of the Bonds) have significant variation in the YTC or YTM. The one with lesser variation will be the basis used by the market participants. For this purpose the secondary market data of three AT-1 bonds on 17.07.2023 was used to compare the YTMs and YTCs. The results reflect lesser variation in the YTCs than the YTMs resulting in the hypothesis that the traders are pricing (valuing) on YTC basis.

3. CRISIL (Valuation Unit): In the written response it was mentioned that based on the latest regulatory guidelines, AT-1 bonds are valued for a maturity date i.e, 100 years from the date of the issuance. During the on-line meeting with the Authority Members on 20.02.2024 CRISIL Valuation Unit representative stated that the market participants use YTC for trading. They further stated that globally 85% of the AT-1 bonds are traded or for them quoted prices are available. Globally, AT-1 bonds are valued on YTC basis where traded/quoted prices are available. In case those prices are not available the valuation may be on the worst of YTC or YTM. As far as Indian market is concerned approx. 10% to 15% of AT-1 Bonds are traded and the pricing is on YTC basis.

   CRISIL Valuation Unit also mentioned that the reasons for reduction in Indian Mutual Funds investments in AT-1 bonds are (a) post write off of Yes Bank AT-1 bonds, the investors are wary of investments (b) credit spread on AT-1 bonds is not attractive enough (c) investment limits and criteria for certain Mutual Funds schemes do not enable investment in AT-1 bonds.

   It was also mentioned during discussions that as these bonds may not be traded actively as mostly they are invested in for being held.

4. ICRA Analytics: SEBI circular on AT-1 Bonds takes into account the various risks in AT-1 Bonds and the only point of difference is the market convention of trading and reporting on Perpetual Bonds is on first call date and the valuation presently being done is 100 years maturity basis.

   AT-1 Bonds can be classified into two clusters, one where the first call is yet to come and the second one where the bonds have not been redeemed on first call date. In case of the former, first call date may be considered as deemed maturity and in the latter case it is prudent to value considering maturity of 100 years.

5. CARE Edge Ratings: In India, banks issuing AT-I bonds have usually not skipped exercising the first call option for redeeming their AT-I bonds and that has become a market practice. The market expects the bank to exercise and redeem on the first call date failing which it would have a negative impact on the fixed income market. The issuer would face significant reputation risk and its ability to raise funds would be hampered.

   Yield to first call should be used as it is recommended by FIMMDA and used by banks for their investment.

6. ICICI Mutual Funds: The issuing bank can redeem AT-1 bond out of the proceeds of fresh issue of instruments ranking similar or junior to it or from its internal accruals. As such non-exercise of call option could be viewed negatively by the market and hence, there is significant disincentive for the issuer not to exercise the call option. Hence, AT-1 bonds may be valued on a YTC basis.

C. Trigger for applying the YTM basis for valuation

7. Almost all the respondents have stated in course of discussions that issuers not exercising the first call option is an exception and redemption at first call date has been the norm. The exceptional domestic cases of first call not being exercised by the Banks are those of J&K Bank in June 2023 and that of Andhra Bank. It was mentioned that the latter incidence was treated by the market adversely and the issuer bank was forced to exercise the call.

8. AMFI stated that the traders would consider the reasons behind the AT-1 Bond issuer bank not exercising the call option and two broad reasons were given. First reason being market scenario i.e., increase in yields resulting in increased cost of new bonds to be issued. Second reason could be due to non-receipt of Regulatory approval, consideration of the bank's regulatory capital and deterioration of bank's credit quality. Investors would view these differently. CRISIL also gave similar reasons for not exercising the first call option.

9. CARE Edge Ratings has stated that the event of not exercising the call option is not considered as a default event for credit rating purposes.

10. RBI has also stated that Indian Banks have almost always exercised call option at the first available call option date, after taking prior RBI approval as required under the Basel III guidelines. This is the case globally also in vast majority of cases. RBI further stated that Banks are keen to call their AT-1 bonds even when there might be little obvious economic benefit in doing so, because the banks are more likely to take a long-term holistic view of future financing cost, considering investor sentiments when caught off-guard by a non-call. Maintaining a consistent policy of calling AT-1 bonds reduces extension risk for investors.

11. Some of the market participants, while mentioning various reasons traders would consider for pricing AT-1 bonds which have not been called, expressed a view to value on YTM basis as a measure of prudence.

D. Factors considered by traders in valuing or pricing these AT-1 bonds

1. The following factors are considered by traders in valuing and pricing AT-1 bonds
   a) Liquidity premium, Number of investors in the ISIN/Issuer Bank
   b) Demand-supply dynamics
   c) Credit rating of the instrument and issuer standing or investor perception of investor in the market
   d) Inherent risk factors/loss absorption clauses in the Bond
   e) Interest rate risk

E. International practice in valuation of these bonds

1. CRISIL Valuation Unit stated that globally most of AT-1 Bonds are frequently traded and quoted and such data points are used for valuations. Most Traders Trade or Quote prices as per the call date. For small component on non-traded securities the valuation agency uses yield to worse – lowest of the price across all calls and maturity.
2. CARE Edge Ratings said based on their query on Refinitive Platform[12] the valuation of international Tier 1 Bonds follows the discounting to the first call date.
3. ICICI Mutual Funds stated that international markets value these bonds on YTC basis.
4. FIMMDA also stated that the predominant practice internationally is to value AT-1 Bonds on YTC basis.

F. Comparable Prescriptions by the international bodies on valuation methodology to be followed

1. Respondents responses suggest absence of such prescriptions. However, FIMMDA has indicated prevalence of valuation waterfall mechanism of Traded Prices, Market Observable Prices and Model Valuation, which is like Fair Value Disclosure Hierarchy given in Ind AS 113 (IFRS 13).

***

12 It is international financial market data and infrastructure like Bloomberg and previously it was part of Thomson Reuters Group.

Annexure 3
Responses by IBBI, SEBI and RBI

1. IBBI vide communication dated 14.02.2024 has not expressed any views on the subject matter of valuation of AT-1 Bonds.

2. RBI responded to two specific areas of clarifications sought as below (detailed response is in annexure 5).
    a. In respect of regulatory guidelines, if any, for granting of approval to banks for exercising call option on AT-1 bonds, RBI mentioned para 1.6 of Annex 4 to the Master Circular on Basel III Capital Regulations dated May 12, 2023.

    b. In respect of clarification regarding whether the non-exercise of the call by the bank leads to any scrutiny or evaluation by RBI, RBI stated that not exercising a call option is inherently capital conserving for a bank, which does not warrant any regulatory scrutiny or intervention. Further, RBI stated that Indian banks have exercised the call at the first call option date. At the same time, RBI has mentioned about a requirement in the Basel III Guidelines that the banks must not create an expectation or signal an early redemption / maturity of the regulatory capital instrument.

3. RBI further suggested that for thinly traded/not traded bonds, the YTM observed on appropriate GSec benchmark bonds may be used, adjusted for adequate spread.

4. SEBI vide their email dated 22.03.2024 stated that normally in any bond with finite maturity, the valuation using benchmarks is done on the basis of yield to maturity (YTM). However, in the case of AT-1 bonds, which are perpetual bonds, the valuation is proposed to be done on yield to call (YTC) basis because of the market practice. However, we request that it be recorded that this decision in respect of valuation is not to be read as that "the next call date is the deemed maturity date for AT-1 Bonds", as this would not be consistent with RBI Master Circular on Basel III Regulations, as understood by us. Further, for other perpetual bonds (non-AT-1 bonds) the valuation using benchmark is done on the basis of YTM, where the deemed maturity is drawn from the longer maturity paper in the market (eg. 50 years GOI Bonds etc). Therefore, there would be consistency issues vis-à-vis the valuation methodology for the AT-1 Bonds, which could perhaps be suitably addressed, if the market practice supports the same.

    Further, regarding the valuation methodology proposed, instead of categorizing bonds in three categories viz. i) actively traded, ii) thinly traded & non-traded bonds and iii) bonds where call is not exercised and not traded, it may be considered to categorize bonds as traded bonds and non-traded bonds. The bonds which get traded may be valued at traded price and the bonds which do not get traded will get the yields adjusted to its respective benchmark security, as laid down in the waterfall method for valuation laid down by SEBI. This may ensure that the valuation is market driven and there is no requirement of subjective regulatory intervention by defining actively traded and thinly traded security and also specifying the additional spreads for thinly and non-traded securities. In light of this, the valuation methodology detailed at para 21, 22 and 23 may be accordingly streamlined.

5. SEBI also shared the responses they received from their counterparts in UK, Germany and US. In case of UK and Germany, the responses indicate that the valuation of assets and off-balance sheet items is to be effected in accordance with applicable accounting framework. US regulator has stated that they have no guidelines or norms regarding the valuation of perpetual bonds, specifically AT-1 bonds issued under Basel norms.

***

Annexure 4

Examples of Bond Trading Quotes and Yields Displayed on Bloomberg Terminals

HSBC 4 PE 91.086 +.010 90.910/91.26 8.949/8.747

As of 15 --x-- Source B

HSBC 4 PERP Corp | Request Access | Settings

11:35:00 ☐ ALLX ☑ Overlay Axe Size ☐ Split Bid/Offer

Spreads vs T 4 ¼ 01/31/26 Govt @ CBBT 99-11 / 99-11⅛ 4.605 / 4.603 11:34

Edit Filters

PCS	Firm Name	Bid Px / Ask Px	Bid Yld / Ask Yld	BSz(M) x ASz(M)	Time
CBBA	CBBT TCA Adjusted	91.134 / 91.408	8.814 / 8.656	1,000 x 1,000	02/15
QMGR	Last QMGR Quote	91.000 / 91.750	7.970 / 7.620	x	11:30
TRAC	FINRA - TRACE	91.125 / Last Trd	8.819 / Last Trd	x Last Trd	d02/15
BVAL	BVAL (Score: 8)	91.051 / 91.482	8.861 / 8.613	x	02/15
BGN	BLOOMBERG GENERIC ..	90.981 / 91.750	8.902 / 8.460	x	02/15
	Last Trade	91.125	8.819	1,000	02/15
		91.000 / 92.000	8.897 / 8.323	1,000 x 1,000	11:34
		91.000 / 91.875	8.897 / 8.395	500 x 500	06:29
		90.581 / 91.950	9.140 / 8.352	430 x 430	07:41
		91.000 / 92.500	8.897 / 8.039	200 x 200	06:38
		90.833 / 91.695	8.994 / 8.498	100 x 100	02/15
GETX	GETTEX	90.690 / 91.970	9.070 / 8.335	600 x 600	02/15
TRL1	FINRA TRACE (>=1MM..	91.125 / Last Trd	8.819 / Last Trd	1,000+ x Last Trd	d02/15
TRMT	FINRA TRACE (>=250..	91.125 / Last Trd	8.819 / Last Trd	1,000+ x Last Trd	d02/15
TRMB	FINRA TRACE (>=500..	91.125 / Last Trd	8.819 / Last Trd	1,000+ x Last Trd	d02/15
TRST	FINRA TRACE (<=1MM..	90.157 / Last Trd	9.345 / Last Trd	27 x Last Trd	d02/13
FRNK	FRANKFURT EXCH	90.993 / 90.993	/	x	d2/15
STGF	Stuttgart Ex FXplus	/	/	x	d2/15
STGT	STUTTGART EXCHANG..	90.972 / 91.373	8.907 / 8.676	x	d02/15
MNCH	MUNICH EXCHANGE	90.690 / 91.970	9.070 / 8.335	x	d02/15
GERM	GERMAN EXCHANGE	90.690 / 91.970	9.070 / 8.335	x	d02/15

HSBC 4 PE 91.086 +.010 90.910/91.26 8.949/8.747
As of 15 --x-- Source B

HSBC 4 PERP Corp | Settings | Yield and Spread Analysis

90.910/91.261 8.949/8.747 BVT3 @ 2/15/ | Notes | 95) Buy | 96) Sell

1) Yield & Spread | 2) Graphs | 3) Pricing | 4) Description | 5) Custom | 6) Calls

HSBC 4 PERP (404280CP2)

Spread	417.76 bp vs	2y	T 4 ¼ 01/31/26
Price	91.261 G.P. 93.061		99-13⅛ 11:34:12
Yield	8.746735 Call		4.569105 S/A
Wkout	03/09/2026 @ 100.00 Consensus		Yld 6 6
Settle	02/21/24		02/20/24

Coupon Schedule

Fix Coup...	Pay Date	Frequency
4.0000	09/09/2...	2.0000
4.0000	09/09/2...	2.0000

Coupon Method C Constant Rate
Coupon is held constant at current rat...
Benchmark Float Frequency 2
H15T - 5 YR 4.2200 %
+ 322.20 (bps) spread
Assumed Cpn 7.4420 % Applied from
First Floater Fix Date 09/09/2026 to
Maturity Date 09/09/2172

Spreads	
G-Sprd	419.7
I-Sprd	433.1
Basis	
Z-Sprd	
ASW	
OAS	

Yield Calculations	Workout	Maturity
Street Convention	8.746735	7.508118
Equiv 1 /Yr	8.937998	7.649047

*Risk calculations done to the end of the fix coupon period - 09/09/2026

Risk	OAS	Workout	Reset
M.Dur / Dur		1.866	2.307
Risk / Convexity		1.736	2.147
DV 1 on 1,000 M		174	215
Benchmark Risk		1.835	1.835
Risk Hedge		946 M	1,170 M

Invoice	
Face	1,000 M
Principal	912,610.00
Accrued (162 Days)	18,000.00
Total (USD)	930,610.00

Annexure 5
Responses by various bodies/experts consulted by NFRA

1. Response by RBI
2. Response by IBBI
3. Response by FIMMDA
4. Response by AMFI
5. Response by CRISIL
6. Response by ICRA
7. Response by CARE Ratings
8. Response by ICICI Prudential
9. Response by India Ratings

RBI response to clarifications in respect of AT-1 bonds

The guidelines on Basel III Additional Tier 1 (AT-1) Bonds are included in Annex 4 read with Annex 15 to the [Master Circular on Basel III Capital Regulations] dated May 12, 2023. The same are enclosed for reference. The guidelines on exercise of call option on AT-1 bonds are provided in para 1.6 'Optionality' of Annex 4 *ibid.*

Query 1. Does the issuing bank need RBI's nod for exercising or not exercising the call option? If any of this is a yes, does RBI have some guidelines for granting approval?

- The call option on the instrument is permissible after the instrument has run for at least five years. To exercise a call option, a bank must receive prior approval of RBI (Department of Regulation).
- Banks must not exercise a call unless:
  - (i) They replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the bank; ***or***
  - (ii) The bank demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.

  Note:

  1. Replacement issues can be concurrent with but not after the instrument is called.

  2. Minimum refers to Common Equity Tier 1 capital of 8% (which includes capital conservation buffer of 2.5%) of Risk Weighted Assets (RWAs) and Total capital of 11.5% of RWAs. Additionally, additional capital requirements identified under Pillar 2 (i.e., vide supervisory processes) may also have to be adhered to.

- Requests for exercising call option are scrutinized by the Department of Regulation, RBI. As guided by the criteria explained above, the capital position of the bank after the proposed call option is exercised is calculated[1] and the same has to be above the minimum regulatory capital ratio plus buffer requirements.

[1] Capital ratios are calculated based on the latest quarterly capital position of the bank.

- There is no explicit requirement in the Basel III guidelines that a bank should intimate RBI about non-exercise of call option or the reasons for the same. Further, there are no guidelines on scrutiny or evaluation by RBI in case of non-exercise of call option on AT-1 bonds. Not exercising a call option is inherently capital conserving for a bank[3], which then obviously does not warrant any regulatory scrutiny or intervention. However, in terms of para 1.13 'Reporting of non-payment of coupons' of Annex 4 to the Master Circular *ibid*, all instances of non-payment of coupon should be notified by the issuing banks to the Reserve Bank.
- In practice, in the Indian context, banks have always exercised call option at the first available call option date, after taking prior RBI approval as required under the Basel III guidelines. The only instance of non-return of principal of AT-1 bonds in India is when Yes Bank's Basel III AT-1 bonds were written down permanently when the bank was reconstituted in March 2020 under Section 45 of the Banking Regulation Act, 1945. The write-off was in accordance with the contractual terms which were drawn up as per the guidelines on loss absorption for non-equity capital instruments provided in Annex 15 of the Master Circular *ibid*.
- It may also be noted that non exercise of call option, even if it makes economic sense when extant coupon rates are lower compared to replacement/ fresh issuances rates, can be viewed unfavourably by investors. The market may perceive non-exercise of call option as a sign of financial weakness and such loss of market confidence can hamper future fund-raising efforts of the bank, thereby increasing the cost of funding for the bank in the long term. Thus even globally, banks have exercised call option on AT-1 bonds in vast majority of cases. Banks are still keen to call their AT-1 bonds even when there might be little obvious economic benefit in doing so, because the banks are more likely to take a long-term holistic view of future financing cost, considering investor sentiments when caught off-guard by a non-call. Maintaining a consistent policy of calling AT-1 bonds reduces extension risk for investors. This leads to investors demanding lower premiums on these bonds by agreeing to lower coupons, which, in turn, keeps long-term capital costs down for banks on issuances of AT-1 bonds.

[3] The primary role of regulatory capital is to enable a bank to undertake commensurate business risks and to absorb business losses when they occur, with the paramount end goal of safeguarding the interests of the depositors.

भारतीय दिवाला और शोधन अक्षमता बोर्ड

Insolvency and Bankruptcy Board of India

7th Floor, Mayur Bhawan, Connaught Place, New Delhi-110001
Tel: +91 11 23462900, +91 11 23462800
Fax: +91 11 23462902, Web.: www.ibbi.gov.in

RVO-15018/2/2024-IBBI
14th February, 2024

Ms. Vidhu Sood
Secretary,
National Financial Reporting Authority (NFRA),
Hindustan Times House,
Kasturba Gandhi Marg,
New Delhi - 110001.

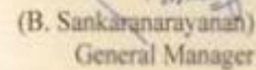
Subject: Matter regarding the valuation methodology of AT-1 bonds under the Ind AS framework.

Madam,

The undersigned is directed to refer to your email dated 3rd February, 2024 on the subject mentioned above.

2. In this regard, it may be stated that we do not have any comments to offer on the referred matter.

Yours faithfully,



(B. Sankaranarayanan)
General Manager

Fixed Income Money Market And Derivatives Association (FIMMDA)

Inputs on the valuation of AT-1 Bonds-NFRA

Background:

To meet the Tier 1 and Tier 2 capital norms as directed by Reserve Bank of India (RBI), Banks in India issue perpetual instruments in accordance with Basel III guidelines.

Banks are major issuers in the AT-1 bonds in the domestic and global markets. There is significant interest in these securities from investors such as Mutual Funds, Insurance Companies, Pension Funds, Foreign Portfolio Investors, Provident Funds, Corporates and HNI Investors.

Basel III compliant AT-1 bonds are perpetual and are issued with special features like call option not below 5 years, discretionary coupon, dividend stopper and loss absorption. These bonds are issued by both public and private sector banks.

Objective:

Determination of valuation methodology for AT-1 bonds proposed to be adopted by SEBI, RBI, Corporates and other regulators like IRDAI.

To be aligned with fair value in accordance with generally accepted accounting principles (as prescribed in Ind AS 113)

Key Issues Referred:

1. *In case of valuation based on discounted cash flow approach, what is the tenor to be used? Is it the tenor used for general perpetual bonds, say 100 years. Considering the call feature of these AT-1 Bonds, should valuation be based on remaining tenor to next call date ? (known as Yield to Call price as against Yield to Maturity)*

Historically, in Indian markets the AT-1 Bonds are priced based on the Yield To Call basis for the following reasons:

a) Yield To Call (YTC) provides with estimate of expected return should the perpetual bond is called by the issuer.
b) Banks are major issuers of AT-1 Bonds and they are institutions of high market standing.
c) Issuers are regulated entities having sound financials and well evolved and closely monitored risk management structures.
d) The issuers have always exercised the calls barring one or two exceptional circumstances. Banks skipping the first call date would undergo material market spread repricing as well as potential market access issues subsequently. Effectively this acts as a market based deterrence.
e) The credit risk, tenor risk (perpetuity) including non-exercising of call and the possible impact of distinguishing features viz. non- payment of principal / coupon etc., dividend stopper are priced in the coupon.
f) It is market practice to price using the prevalent risk free /top- credit class reference yield curves corresponding to the First Call Date duly adjusted to the risks associated with the AT-1 bonds.

We understand that globally pre-dominant practice is to value them at YTC basis, probably for similar reasons enumerated above. It is also the prevalent market practise to estimate the fair value of perpetual bonds by considering the potential call option embedded in these securities.

We also understand that investor has flexibility of using a de-facto maturity date (an assumed tenor) say 60, 150 years etc, depending on their assessment of call probability of the securities including issuer's credit standing and track record. On the choice of assumed tenor, various tenors are in the mix.

However, in India, availability of comparable long curves poses a challenge. Until recently G-Sec issuances were for a tenor of 40 years and recently GOI has issued 50 year paper. Arriving at a 100 year curve, using mathematical modes, based on certain assumptions though possible, would probably be prone to volatility. This would not be helping the market.

Our View:

Primacy of traded prices is an accepted principle in valuation for any security. Traders are pricing AT-1 bonds on YTC basis duly factoring various risks involved and that the issuer will exercise the option. Any other model of valuation would be away from traded levels thus defeating the very purpose.

FIMMDA discussions on the subject with member institutions also indicate the YTC pricing practice by the Banks etc. This is reaffirmed at the monthly valuation committee meeting as well. Accordingly the YTC based valuation is adopted by FIMMDA.

It is a well-established market convention globally and in domestic markets that these bonds are priced to the first call date. In the case valuation using any other tenor / assigned maturity may lead to immediate diminution of value, adversely impacting the appetite and activity in the security.

Using an assigned tenor (ex. 60/100/150years) for valuation of these bonds, duly accounting for the existence of a call date at every year post the first call date would be cumbersome.

This would result in non-traded bonds being valued at substantial variation to the market prices and leading to lesser liquidity and hindering development of a proper term structure for such instruments.

Further, theoretically valuation practice using with an assigned tenor be based on bank specific base yield curves for every year beyond the first call date till the assigned tenor. Currently bank bonds beyond infra bonds of up to 10 years are not available and the longest maturity AAA.

PSU/PFI names do not have a curve beyond 15 years, with 10y being the most liquid and readily available. Even government securities do not have a curve beyond 50 years.

Thus, Yield To Call (YTC) valuation approach would not only align to the trading practices in India but also would be in line with global practices.

2. *In the event call option is not exercised by Issuer, do we need to start valuation on YTM basis straightaway or do traders consider other risk factors also?*

   Related issue: Should 100 year as maturity be applied only if the bank skips a call option, skips any coupon payment or undergoes a significant credit deterioration?

Our View:

As stated above, the instances of a call not being exercised, are an exception not the rule.

The decision of the bank to not call back these instruments are based on bank specific financial parameters that need to be approved by the regulator.

In such an event spreads for such security and for some similar issuers the spreads are expected to harden duly recognizing the adverse impact.

Valuation of a security using traded prices would reflect the current fair value including the skipping of call.

In case there are no traded prices (as prescribed by regulators), a model valuation would be needed to applied, with an assigned tenor to reflect perpetuity. A guidance using longest available G-Sec may be considered, duly adjusted for illiquidity, rating downgrade etc.

A possible change in Basel III bond structure providing for suitable step up in coupons if the first call date is skipped. This would provide a more sound basis for continuing with first call valuation.

3. *What are the other various factors such as credit risk, liquidity, credit rating of the issuer banks, model adjustment etc which are considered by traders in valuing or pricing these AT-1 Bonds?*

Our View:

It is market practice to price using the prevalent risk free /top-class credit yield curves corresponding to the call tenor duly adjusted to the risks associated with the AT-1 bonds. Accordingly, the credit risk, risk from the perpetuity of tenor including non-exercising of call, illiquidity of the securities, and the possible impact of special features viz. non- payment of principal / coupon etc., dividend stopper are usually priced in the coupon.

The factors considered by a trader are the following

a) Issuer standing in the market (SBI may be successful in garnering funds with low coupon than other PSBs or Pvt Banks)
b) Credit rating of the issuer / Bond.
c) Liquidity of such AT-1 Bonds of the issuer in the market.
d) The inherent risk factors / loss absorbing clauses in the Bond.

4. *International practices followed if valuation norms of AT-1 instruments for non-bank investors like Mutual Funds have to be aligned to be at par with market/international practices.*

Our View:

As provided vide our response vide Issue 1,

We understand that globally the pre-dominant practice is to value them at YTC basis, probably for similar reasons enumerated above. It is also the prevalent market practise to estimate the fair value of perpetual bonds by considering the potential call option embedded in these securities.

We also understand that investors globally have flexibility of using a YTC approach or a de-facto maturity date (an assumed tenor) say 60, 150 years etc, depending on their assessment of call probability of the securities including issuer's credit and track record. On the choice of assumed tenor, various assumptions are in vogue.

5. *Practice followed by international jurisdictions or any standards which have been prescribed by IOSCO after similar instances of non-exercise of call option by any foreign banks?*

Our View:

Globally accepted valuation principles follow the established waterfall mechanism:

1. Traded Prices
2. Market Observable Prices
3. Model Valuation

In liquid markets the availability of traded prices helps the fair valuation of the securities both in normal conditions and also in specific instances of non-exercising of all/ non-payment of coupon / deferment of coupon etc. The nature of instrument being capital instrument, these risks /impact are adequately priced in original coupon or the traded prices. Also investors are expected to be aware of these possible outcomes and adequately price them. In several jurisdictions we understand that access to these instruments is limited a qualified investor groups, thus addressing pricing efficiency.

AT-1 Bonds

Banks, in India, typically issue the following instruments in the debt capital markets:

(a) Long Term Bonds: These are plain vanilla senior bonds with no call / put option with a definite redemption date.

(b) Basel III compliant Tier 2 Bonds: These bonds are typically issued with a call option exercisable after at least 5 years with a definite redemption date and are subject to loss absorption on account of point of non-viability

(c) Basel III compliant Additional Tier 1 Bonds: These bonds are typically perpetual in nature and issued with a call option exercisable after at least 5 years and are subject to loss absorption on account of point of non-viability as well as pre-specified trigger and Coupon Discretion.

2) Valuation of Additional Tier 1 Bonds:

As per the features of the bonds issued by Banks, the Long-Term Bonds are in the nature of a senior debenture whereas the difference in valuation between Long Term Bonds and Tier 2 Bonds represent the risk premium on account of the feature of point of non-viability.

Similarly, the difference in valuation of a Tier 2 Bond and AT-1 Bond would represent premium on account of

(a) Loss Absorption feature due to Pre-Specified Trigger level

(b) Coupon Discretion

(c) Extension premium due to non-exercise of call option and

d) illiquidity premium due to regulatory restriction on investor to invest in these bonds. These restrictions can be either due to rules which would prevent these bonds from being taken in a portfolio or make it unprofitable to invest in these securities etc.

From a theoretical perspective, the AT-1 bonds should always be priced over the Tier 2 Bonds and Long Term Bonds.

Another issue while valuing Additional Tier 1 Bonds is the tenor to be used while valuing these bonds. The choice is between the call date(s) or the final tenor (taking 100 years as a proxy for perpetual nature of instrument).

Under the discounted cash flow method, these bonds should be valued for each call option date by assigning a probability of exercise of such call till the maturity of the bonds (say 100 years in case of perpetual bonds). However, the probability is difficult to calculate as it depends on a number of factors including the interest rate outlook, the capital position of respective banks, credit risk parameters, general economic conditions etc.

We have analysed the past secondary market data to understand the tenor preference of the investors to value these bonds and attempt to draw conclusions from the same. We make two hypotheses to understand the tenor preference:

(a) In case a tenor of 100 years is being used, given the recent issuances of these instruments, there should

not be any difference in secondary market prices between an AT-1 bond which has less than 1 year to call option and an AT-1 bonds which has 5 years to the call option as in both the cases the residual maturity would be more than 95 years.

(b) In case the preference is to use the first call date to price the bonds, we should see variations in the coupon rate for an AT-1 bonds which is near to its call option maturity compared to an AT-1 bonds which is far from the call option date.

(c) The historical analysis has been done for SBI AT-1 bonds covering 3 month period from December 2020 to February 2021 (i.e. prior to issue of SEBI Circular on valuation of AT-1 Bonds) when the bonds were actively traded. The results are tabulated in the table below:

Date	Near to Call			Further to Call			Difference
	Residual Maturity	ISIN	Yield	Residual Maturity	ISIN	Yield	
01-Dec-20	0.90	INE062A08140	5.05	4.98	INE062A08272	7.40	-2.35
22-Jan-21	0.62	INE062A08124	5.11	4.84	INE062A08272	6.98	-1.87
28-Jan-21	0.74	INE062A08140	5.15	2.90	INE062A08181	6.73	-1.58
28-Jan-21	2.90	INE062A08181	6.73	4.82	INE062A08272	6.98	-0.26
03-Feb-21	0.59	INE062A08124	5.15	1.50	INE062A08157	6.35	-1.20
03-Feb-21	1.50	INE062A08157	6.35	4.81	INE062A08272	7.22	-0.87
12-Feb-21	1.47	INE062A08157	6.08	4.78	INE062A08272	7.20	-1.13
18-Feb-21	2.79	INE062A08173	6.80	3.53	INE062A08215	7.20	-0.40
25-Feb-21	1.44	INE062A08157	5.80	4.75	INE062A08272	7.30	-1.50

It can be seen from the above table that there is significant variation in yield of AT-1 bonds which are near to the call option date as compared to AT-1 bonds which are further from the call option date. Hence it can be summarised that the market practice is to value these bonds based on first call option date. The call extension premium i.e. premium in extension of maturity of the bonds due to non-exercise of call option, if any, is built in the pricing of the AT-1 bonds.

(d) Further to the above, since the price consideration is already fixed at the time of the deal, we have tried to calculate the yield using two scenarios – (a) considering 100-year maturity and (b) considering the first call option date. We have selected a date randomly wherein multiple ISINs are traded which has significantly different coupon. The results are tabulated below:

ISIN	INE062A08314	INE062A08280	INE062A08223
Settlement Date	17-07-2023	17-07-2023	17-07-2023
Coupon	7.75%	7.72%	8.50%
Price	98.47	99.0647	100.5245
Time to first call	4.14	3.13	1.35
Yield to Maturity	7.8675%	7.7904%	8.4490%
Yield to first call	8.1889%	8.0575%	8.0133%

In case of YTM methodology, the residual maturity of all the above bonds is above 95 years, however they are trading at a very wide range of 7.79% - 8.45% on the same day which is counter intuitive. However, in case YTC methodology is used, the residual maturity ranges between 1.35 years to 4.14

years and the yield for different maturities are different (range is 8.01% - 8.19%). Hence, using the secondary traded prices as benchmark, it can be concluded that the market practice is to use YTC method.

(e) **Response to the queries raised**:

Query 1: In case of valuation based on discounted cash flow approach, what is the tenor to be used? Considering the call feature of these AT-1 Bonds, should valuation be based on the remaining tenor to next call date (known as yield to call price as against yield to maturity price)

Response 1: In the DCF approach, as highlighted above, DCF is calculated based on each call option date (i.e. considering that call option date is the final maturity date) and a probability is assigned to exercise of call option on each call option date. The DCF value arrived at each call option date is multiplied by the probability that the call option would be exercised on the call option date to arrive at the valuation. Since, the probabilities may not be easy to calculate, the alternative is using a tenor. As highlighted above, based on our limited historical analysis of trading patterns of SBI AT-1 bonds, the investor preference is to use yield to call price to value AT-1 Bonds.

Based on above, the valuation / pricing should be done as under:

- In case the AT-1 bonds get traded regularly, the traded price should be taken for the purpose of valuation.
- In case the bond is not traded, the day-on-day price movement of the bond would be the change in yield of the identified benchmark bonds * duration of AT-1 bond (computed considering call date as maturity date).
- Other look back mechanism basis the yield to call.
- To summarise, since the AT-1 bonds get traded in terms of Yield to Call, the valuation of the AT-1 bonds should also be on Yield to Call basis.

Query 2: In the event call option is not exercised by the issuer, do we need to start valuation on YTM basis straightaway or do traders consider other risk factors also? Related issue: Should 100 years as maturity be applied only if the bank skips a call option, skips any coupon payment or undergoes a significant credit deterioration?

Response 2: In the event call option is not exercised, the traders would consider the reason behind non exercise of call option. Typically, there would be two important reasons for non- exercise of call option –

(a) market scenario, wherein due to increase in yields, the issuer would not exercise the call option as the existing bonds are cheaper compared to a new issuance without any deterioration in the credit quality of the bank or

(b) due to an event which is either because of non-receipt of approval from the regulator to exercise call option or non-exercise by the issuer due to concerns on the level of regulatory capital of the Bank, exercise of coupon discretion due to deterioration of credit of the bank etc. The responses of the investors would be different.

However, it would be prudent to start the valuation on YTM basis.

On the related issue, we believe that non-exercise of call option due to the second reasons is a significant event, which should ideally require the bonds to be valued as per 100 year maturity rule and to further apply additional discount based on investors assessment of the underlying reasons.

Query 3: What are the other reasons which are considered by the traders while valuing AT-1 bonds?

Response 3: This has been highlighted in our earlier section.

Query 4: International practices followed if valuation norms of AT-1 instruments for non-bank investors like Mutual Funds must be aligned to be at par with market/international practices.

Response 4: International practice, as far we know, is a poll amongst market participants and internal risk mode of the specific investors. The credit deterioration gets captured in the traded prices. Active Credit default swaps also help in understanding the changing perception of the credit profile of the bank.

Query 5: Practice followed by international jurisdictions or any standards which have been prescribed by IOSCO after similar instances of non-exercise of call option by any foreign banks.

Response 5: We tried digging specific regulations but couldn't get any. Therefore, wouldn't be able to comment.

Responses to the specific questions

1) In case of valuation based on discounted cash flow approach, what is the tenor to be used? Is it the tenor used for general perpetual bonds, say 100 years? Considering the call feature of these AT-1 Bonds, should valuation be based on remaining tenor to next call date (known as Yield to Call price as against Yield to Maturity)

Response - In March 2021, SEBI amended the valuation rule of bank bonds (AT-1 & Tier II) under Basel III with the following glidepath:

Time Period	Deemed Residual Maturity of Basel III AT-1 bonds (Years)
Till March 31, 2022	10
April 01, 2022 – September 30, 2022,	20
October 01, 2022 – March 31, 2023,	30
April 01, 2023, onwards	100 (100 years from the date of issuance of the bond)

Valuations agencies, for perpetual bonds (non-bank/corporate), use 100 years from the date of issuance as maturity date and factor options (call/put, if any). Based on the latest regulatory guidelines, AT-1 bonds are valued for a maturity date, i.e., 100 years from the date of issuance.

2) In the event a call option is not exercised by Issuer, do we need to start valuation on YTM basis straightaway or do traders consider other risk factors also? Related issue: Should 100 year as maturity be applied only if the bank skips a call option, skips any coupon payment or undergoes a significant credit deterioration?

Response - Valuation agencies monitor trades, issuances and polls/quotes in the same instrument, issuers, and similar issuers to align prices to latest market trends. These inputs are primarily driven by credit, liquidity, and demand-supply dynamics for such bonds.
Credit transition at instrument and issuer levels are tracked and the relevant regulatory and AMFI best practice guidelines are applied to factor in such events from a pricing standpoint. In case of coupon not being paid on payment date to investors, it is recognized as an event of default and prescribed haircut for instruments with D Credit rating is applied.
Multiple reasons/circumstances under which the call may not be exercised by the issuer include factors such as credit deterioration, rising interest rates cycle (where the issuer would like to continue with lower coupon and raise when the interest rate cycle reverses) and regulatory restrictions/guidance.
A similar event was observed in the case of J&K Bank for its Basel III Tier 1 bond, where we believe the call option was not exercised and the bond continues to be outstanding post its first call date on 14 June 2023. Therefore, in case this instrument was held by a mutual fund, it would continue to be valued assuming a maturity of 100 years as per the guidelines for AT-1 bonds.

3) What are the other various factors such as credit risk, liquidity, credit rating of the issuer banks, model adjustment etc. which are considered by traders in valuing or pricing these AT-1 Bonds?

(Response): As per our understanding, these are the general factors which are considered by traders in pricing the AT-1 bank bonds:

a) Liquidity premium
b) Demand-supply dynamics
c) Credit rating of the instrument
d) Investor perception of the Issuer bank
e) Number of investors in the ISIN/Issuer bank

4) International practices followed if valuation norms of AT-1 instruments for non-bank investors like Mutual Funds have to be aligned to be at par with market/international practices.
5) Practice followed by international jurisdictions or any standards which have been prescribed by IOSCO after similar instances of non-exercise of call option by any foreign banks?

Response - On the global practices front, on the basis of our discussion with one of the global valuation agencies, we understand that the most of the AT-1 bank bonds are frequently traded or quoted and such data points are then used for valuations. And most traders trade or quote prices as per the call date. However, for the small component non-traded securities, the valuation agency uses yield to worse (lowest of the price across all calls and maturity).

Other inputs

Additionally, given the context we would like to share the observations below for your ready reference.

Reduction in MF holdings in AT-1 bank bonds.

The MF holding in AT-1 bank bonds has reduced. In our interactions with Mutuals Funds, the reasons cited for significant decrease in MF's appetite for investment in AT-1 bank bonds are as below:

1) Post Yes bank write-off event, the investors are wary of investing in AT-1 bonds and have an extremely low risk appetite for such instruments.
2) The credit spread of AT-1 bonds is not attractive enough to invest in AT-1 even in higher duration schemes.
3) The implementation of PRC has specifically impacted three mutual fund categories – ultra short duration (0.25 to 0.5 year duration), low duration (0.5 to 1 year duration) and short duration (1 to 3 year duration) – from an AT-1 investments perspective. Schemes in these categories are usually placed in Class I and II PRC buckets, which cannot invest in securities with residual maturity more than 3 years and 7 years, respectively. In order to invest in AT-1 bonds, these schemes would need to be placed in Class III PRC duration bucket, which can have any Macaulay duration — an option that is available to mutual funds and that would indicate higher duration risk to investors.

Valuation may not be the sole reason to move away from the AT-1 class of securities. The interest will peak only if the credit spread becomes attractive and exceptional events like Yes bank are dealt with appropriately, and a vibrant market is created for active trading of these bonds.

Notes

- *PRC (Potential Risk Class) indicates the maximum credit and interest rate risk that a fund manager intends to take in a particular scheme.*

The valuation of Perpetual Bonds are conducted based on regulatory circulars and guidance and as per the covenants and structure of the security. There are few technical dimensions which may be considered with respect to AT-1 Bonds-

1. It has loss absorption feature including write-offs at Point of Non-Viability (PONV)
2. It has no fixed maturity date
3. It has call option after a defined time which is optional in nature subject to approval of RBI.
4. The risk associated with the Perp is in terms of loss of coupon, loss of capital and duration risk, which needs to be disclosed to the investors.
5. It's a convention that the bank redeems the bond on the 1st call date. But, it's non-binding in nature and it is disclosed as covenants in the 'Information Memorandum'.

SEBI circular on AT 1 bonds intends to take the above consideration and attempts to clearly underlines facts and risk associated with the AT-1 Bonds. It calls out the risk (risk of write-off and duration risk), defines maturity and clearly differentiates that the option to call is not the same as compulsory call thus aligning the valuation methodology with the structure and risk associated with the security. From the investor perspective they are more informed of the risk

. The only point of difference that can be observed is the market convention of trading & reporting of Perps on first Call date and the valuation presently being done at maturity(100th Year from the issue date).

As per our view the below step may be introduced to bring proximity between present methodology which is based on above facts and factors risk which are inherent with the structure.

The entire universe of the AT-1 Perp may be divided between bonds for which the first call is yet to come(Cluster 1) & those bonds for which the first call is passed and the bond is not redeemed(Cluster 2).

For cluster 1 the first call date may be considered as deemed maturity for the purpose of valuation aligning with market convention. However this requires insertion of PUT option at the CALL point in security structure/ IM. In case this is not possible, the periodic disclosure/undertaking on the capital adequacy and the callability of the bond (considering risk of write off etc) may be provided (Regulator may issue supporting guidance for deemed maturity & periodic disclosures) along with disclosure of other risk associated with the security. For bonds which has passed the 1st call date it is prudent to value at the maturity point considering maturity as 100 years.

Let us know if any further

discussion is required. Regards,

Ashwini Kumar

CARE RATING

Valuation of AT-I bonds for Mutual Funds

Synopsis

As per the rating criteria of CARE Ratings, to factor in the additional risks in Additional Tier I (AT-I) instruments, the *rating is notched down by one to several notches below the Tier II Bond rating* depending on various parameters. Although, the bonds are perpetual, as per the extant market practice, Banks do exercise the first call option which is minimum 5 years from the date of issue, failing which significantly deteriorates their liability franchise.

Background

Mutual funds were valuing AT-I bonds as per call to maturity. However, complete writing off of AT-I bonds by Yes Bank in 2020, as part of a reconstruction plan prompted a re-think on how perpetual bonds were to be valued.

Prior to the incident mutual funds were one of the largest categories of investors in perpetual bonds; however, post the SEBI circular on valuation had an impact on the NAVs of the funds having AT-I bonds.

SEBI came out with a circular dated March 10, 2021 for mutual funds directing that for the purpose of valuation maturity of all perpetual bonds shall be treated as 100 years from the date of issuance of the bond.

Post that, AMFI came out with a circular dated March 24, 2021 giving out a glide path for smooth implementation of SEBI circular. AMFI's circular recommended to value perpetual bonds as 10-year maturity papers until March 2022, 20 year maturity until September 2022, 30 year maturity papers until March 2023, and 100-year papers thereafter. The current rules have discouraged mutual fund participation and the demand for AT-I bonds by mutual funds has plummeted to a great extent.

Yes Bank is the first and only case in India where the AT-I bonds of Rs.8,400 crore were written-off in March 2020 as per directions of RBI. The Tier II bonds of Lakshmi Vilas Bank (LVB) were written down in November 2020 as per the instructions of RBI before its merger with DBS Bank India Ltd. These two cases triggered a multitude of issues in the subordinate bond market.

Further international incidents of writing off of AT-I bonds worth 17 bn $ by Credit Suisse internationally before merger with UBS spooked investors. These incidents had the impact of increasing spreads for AT-I bonds as compared to Tier II bonds.

The valuation for investments in AT-I bonds for Banks is guided by FIMMDA which states that pricing of AT-I would be the traded price and in absence of any trades, the valuation is done on a yield to first call basis which is an international practice as well.

Background – Observed Market practice for exercise of first call option on AT-I bonds

Though redemption of AT-I bonds at the first call option date is discretionary, banks have been following the norm in India of exercising the first call option. There have been very few instances of the banks skipping the first recall for AT-I bonds in Indian fixed income market.

There had been one instance of erstwhile Andhra Bank, which had decided not to exercise call option for AT-I on the call option date, later changed its decision and redeemed it perpetual bonds on the first call date. Andhra Bank faced a lot of flak for its earlier decision. Another instance was when The South Indian Bank had decided to not to redeem Tier II bonds on its first call option due to rising interest rates.

These are limited instances and the probability of banks choosing not to exercise the first call option is typically low due to the implications on future pricing and market access in addition to reputational risk.

CARE Ratings' criteria on Rating of Additional Tier I debt instrument (under Basel III)

CARE Ratings considers the following key features while assigning rating to these instruments:

- The bank has full discretion to cancel coupon payments anytime.

- The coupon is to be paid out of current year profits. However, if the current year's profits are not sufficient, i.e., payment of such coupon is likely to result in losses during the current year, the balance of coupon payment may be made out of reserves representing appropriation of net profits, including statutory reserves and excluding share premium, revaluation reserve, foreign currency translation reserve, investment reserve and reserves created on amalgamation provided the bank meets the minimum regulatory requirements for Common Equity Tier I [CET I], Tier I and Total Capital Ratios and capital buffer frameworks as prescribed by the RBI.

- The instrument may be written-down upon CET I breaching the pre-specified trigger of 6.125% (as per extant guidelines) after that, or written-off on occurrence of the point of non-viability (PONV) trigger event. The PONV trigger shall be determined by the RBI.

To factor in the additional risk in these instruments, the *rating is notched down by one to several notches below the Tier II Bond rating* depending on the expected adequacy of eligible reserves after capital conservation buffer, cushion over minimum regulatory capital and other credit risk assessment parameters of the individual bank. Similarly, AT I instruments may also be rated lower than Innovative Perpetual Debt Instruments (IPDI) under Basel II based upon the credit profile of the bank. Under Basel III, severity of loss is likely to be significantly higher and permanent as PONV trigger could lead to write-off/conversion to equity capital unlike IPDI under Basel II where there is no impact on principal. The *notching of AT I instruments would also be dependent on the rating of the bank's senior instruments*, where stronger banks with higher rating may see lower notching, whereas notching could increase for lower rated banks. While this relationship will generally hold, the rating of the senior instruments of the bank will be looked in conjunction with the other factors mentioned earlier for determining the notching for AT I.

Any *delay/omission in payment of interest/*principal (as the case may be) due to invocation of any of the features mentioned above *would constitute as an event of default* as per CARE Ratings' definition of default and as such these instruments may exhibit a somewhat sharper migration of the rating compared with other subordinated debt instruments.

For public sector banks (PSB), the rating factors in government support. The restriction on coupon payment in the event of loss or through distributable reserve may pose challenge in coupon servicing for weaker banks. However, in the past, the GoI, as a shareholder, has provided support to PSBs to not only make the coupon payments but also to call back the bonds. In case of PSBs, it is likely that the GoI would provide capital support well in advance so that the coupon payment trigger is not breached.

For private sector banks (PVBs), their intrinsic strength is reflected in the rating of their conventional debt instruments. As such, the notching may be lower for higher rated PVBs, whereas the notching could be wider for lower rated PVBs.

Due to the events in the past few years, there are very few issuers of AT-I, being PSU Banks or top tier Private banks. Apparently, the current market appetite beyond this cohort is weak.

A brief comparison of the key features of Additional Tier I (AT-I) and II bonds under Basel III is as under:

Clause	Additional Tier I bonds	Tier II bonds	Credit Risk Impact
Coupon Discretion	The bank must have full discretion at all times to cancel distributions/payments. The interest shall not be cumulative.	No such clause	Coupon cancellation may lead to economic loss to investors and hence an event of default.
Lock-in clause on payment of coupon/principal in going concern scenario	If a bank does not have positive earnings and has a common Equity Tier I ratio less than 8%, the bank will not be able to make coupon payments on the perpetual bonds	No constraint for coupon or redemption until the occurrence of PONV.	Probability of default on AT-I bonds is higher than Tier 2, as the trigger is CET1 in case of AT-I bonds.
Loss Absorption Features	Can be permanently writtenoff or converted into common equity in case of two events: 1. Breach of CE Tier I ratio of 5.5% till September 30, 2020 & Breach of CE Tier I ratio of 6.125% after October 01, 2021 (as per current guidelines) 2. Upon declaration of nonviability by RBI on reaching the trigger of PONV	These instruments can be written off or converted into common equity upon declaration of point of nonviability (PONV) by RBI.	Under Basel III, loss absorption is likely to be significantly higher as a PONV trigger could lead to write off/conversion prior to any injection of capital. Further, Tier I bonds carry a loss absorption feature in case of breach of minimum CET I trigger.

A list of CARE Rating Ltd's ratings for outstanding AT-I and Tier II instruments of banks is given in **Annexure I**

Queries:

1) In case of valuation based on discounted cash flow approach, what is the tenor to be used? Is it the tenor used for general perpetual bonds, say 100 years. Considering the call feature of these AT-I Bonds, should valuation be based on remaining tenor to next call date (known as Yield to Call price as against Yield to Maturity)

Reply:

- The lower ratings for AT-I bonds factors in the risk that the servicing the coupon and repayment is subordinate to Tier II and infrastructure bonds. Further, the AT-I bonds have features which allow full discretion at all times to cancel distributions/payments of coupon and it can be permanently written-off or converted into common equity in case of certain events.
- In India, banks issuing AT-I bonds have usually not skipped exercising the first call option for redeeming their AT-I bonds and that has become a market practice. The market expects the bank to exercise and redeem on the first call date failing which it would have a negative impact.

Annexure – 1 Outstanding ratings of CARE Ratings Limited for AT-I bonds and Tier II bonds

	AT-I bonds rating	Tier II bonds ratings
State Bank of India	CARE AA+; Stable	CARE AAA; Stable
Union Bank of India	CARE AA+; Stable	CARE AAA; Stable
Punjab National Bank	CARE AA+; Stable	CARE AAA; Stable
Indian Bank	CARE AA+; Stable	CARE AAA; Stable
HDFC Bank	CARE AA+; Stable	CARE AAA; Stable
ICICI Bank	CARE AA+; Stable	CARE AAA; Stable

ICICI Prudential
AT-1 Bonds

Background

Prior to deciding on the approach for valuation of Additional Tier-1 (AT-1) bonds, it is important to understand the features of the instrument. Till 2019, the market had been pricing AT-1 bonds predominantly as debt instruments.

Subsequently, there have been many instances wherein such instruments have been subjected to a treatment worse than equity shares of the issuer, as was evident in the case of Yes Bank Limited (YBL), wherein as part of the reconstruction scheme proposed by the Reserve Bank of India (RBI), AT-1 bonds issued by YBL were written-off entirely while equity shares weren't.

In India, banks have issued AT-1 bonds with three types of call options (as per the Reserve Bank of India (RBI) Master Circular on Basel III Capital Regulations) viz.

a) Issuer call, exercisable after the instrument has run for at least five years;
b) Tax event call, exercisable in an event the instrument becomes non tax deductible; and
c) Regulatory event call, exercisable under an event there is a downgrade of the instrument in regulatory classification (e.g. if it is decided by the RBI to exclude the instrument from recognition under regulatory capital) with approval from RBI.

Following the announcement of recapitalisation of Public Sector Banks (PSBs) by the Government of India (GoI) in November 2017, many investors had anticipated an improvement in credit profile of the issuing banks (as was evident in the reduction in yields observed in case of AT-1 instruments issued by many PSBs) and hence, had invested in AT-1 bonds issued by such banks through secondary market transactions.

There have been instances wherein banks have exercised the 'regulatory event call option' on its outstanding AT-1 bonds (e.g. banks referred to under Prompt Corrective Action (PCA) framework). At the time of issuance of AT-1 bonds, some of the banks were already classified under the PCA framework. Pursuant to the exercise of call option, the issuer redeemed the bonds at par value. Redemption of AT-1 bonds at par on account of the exercise of the call option resulted in Marked-to-Market (MTM) losses for the investors. If the outstanding AT-1 bonds were to be redeemed at the then prevailing market rate (rather than at par), the extent of such losses could have been relatively lower.

Valuation approach (with maturity being considered as 100 years) and adverse investor experience through aforementioned events have adversely impacted investor confidence in AT-1 bonds and as a result, the ownership by market participants and consequently, their trading volumes have remained low.

Responses to the questions

1. In case of valuation based on discounted cash flow approach, what is the tenor to be used? Is it the tenor used for general perpetual bonds, say 100 years. Considering the call feature of these AT-1 Bonds, should valuation be based on remaining tenor to next call date (known as Yield-to-Call (YTC) price as against Yield-to-Maturity (YTM)).

   The issuing bank can redeem AT-1 bond out of the proceeds of fresh issue of instruments ranking similar or junior to it or from its internal accruals. As such non-exercise of call option could be viewed negatively by the market and hence, there is significant disincentive for the issuer not to exercise the call option. Hence, AT-1 bonds may be valued on a YTC basis.

2. In the event, call option is not exercised by issuer, do we need to start valuation on YTM basis straight away or do traders consider other risk factors also? Related issue: Should 100 year as maturity be applied only if the call option, skips any coupon payment or undergoes a significant credit deterioration?

   As mentioned hereinabove, AT-1 bonds could be continued to be valued on YTC basis, till the call option date. In the event, the issuer does not exercise the call option available on such bonds or it has skipped any coupon payment, or has undergone significant credit deterioration (as evidenced through downgrades in credit ratings below a threshold rating grade), AT-1 bonds issued by such entity may be valued on YTM basis, with maturity of the bond being considered as 100 years.

3. What are the other factors such as credit risk, liquidity, credit rating of the issuer banks, model adjustment etc which are considered by traders in valuing or pricing these AT-1 bonds?

   The valuation by market participants does include various elements such as credit rating of the issuer, liquidity available for such instruments (potential impact cost on relatively illiquid bonds), interest rate risk as well as likelihood of potential regulatory event adversely impacting the issuer/ the instruments, spread available on comparable instruments (specifically in the case of Mutual Funds wherein there is regulatory limit at individual scheme level, on investments into debt instruments issued by banks/ NBFCs.

4. International practices followed if valuation norms of AT-1 instruments for non-bank investors like mutual funds have to be aligned to be at par with market/ international practices.

   It is our understanding that the valuation norms of AT-1 instruments for mutual funds in international markets would be similar to the one outlined hereinabove under the response to the query#1 i.e. valuing the AT-1 bonds on a YTC basis.

5. Practice followed by international jurisdictions or any standards which have been prescribed by IOSCO after similar instances of non-exercise of call option by any foreign banks?

   One would refrain from commenting on this query as one does not have sufficient information on such practices.

India Ratings
AT-1 Bonds

Many thanks for reaching out to us.

Sir, the Agency considers AT 1 bonds as a loss absorbing instrument due to the inherent features of the instrument which include the option of coupon deferral or omission and also the features of write-down or conversion, if required. As such the Agency believes that the level of complexity associated with this instrument is high due to features. This is also reflected in the mandatory notching down that we have for the instrument from the anchor ratings.

Please find attached our Rating Criteria that contains a more detailed understanding of the rating approach followed by the Agency for rating such instruments.

We look forward to engaging with you on an ongoing basis on this and other matters. Thanks

राष्ट्रीय वित्तीय रिपोर्टिंग प्राधिकरण
NATIONAL FINANCIAL REPORTING AUTHORITY

7-8th Floor, Hindustan Times House,
18-20 Kasturba Gandhi Marg, New Delhi - 110001