

TATA MUTUAL FUND

VALUATION POLICY

As per SEBI Regulation / Guidelines, Tata Asset Management Limited (TAML) has adopted the below mentioned Valuation Policy for valuation of investment securities.

I EQUITY / EQUITY RELATED SECURITIES

A Equity Shares

1. **Traded Securities:** For the purpose of valuation, TAML has adopted National Stock Exchange (NSE) as the Primary Stock Exchange and Bombay Stock Exchange (BSE) as the Secondary Stock Exchange, except for Tata Index Fund – Sensex for which BSE will be considered as the Primary Stock Exchange and NSE will be considered as the Secondary Stock Exchange.
 - (a) The securities shall be valued at the closing price on the Primary Stock Exchange.
 - (b) When on a particular valuation day, a security has not been traded on the Primary Stock Exchange; the value at which it is traded on the Secondary Stock Exchange will be considered.
 - (c) When a security is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange or any other stock exchange, as the case may be, on the earliest previous day may be used provided such date is not more than 30 days prior to valuation date. If no price is available on any Stock Exchange for more than 30 days, than the security will be treated as a non-traded security and valued accordingly.
2. **Thinly Traded Equity / Equity Related Securities.**
 - (a) When trading in an equity/equity related security (such as convertible debentures, equity warrants, etc.) in a month is both less than Rs.5 lacs and the total volume is less than 50,000 shares, it shall be considered as a thinly traded security and valued accordingly.
 - (b) In order to determine whether a security is thinly traded or not, the volumes traded in all recognised stock exchanges in India may be taken into account.
3. **(i) Non-Traded Equity securities** When a security is not traded on any stock exchange for a period of thirty days prior to the valuation date, the scrip must be treated as a 'non traded' security.
(ii) Non-traded / thinly traded equity securities:
Non -traded /thinly traded securities shall be valued 'in good faith' by TAML on the basis of the valuation principles laid down below:

(a) Based on the latest available Balance Sheet, net worth shall be calculated as follows:

Methodology:

(b) Net Worth per share = [share capital+ free reserves (excluding revaluation reserves) – Misc. expenditure and Debit Balance in P&L A/c, intangible assets and accumulated losses] Divided by No. of Paid up Shares.

(c) Average capitalization rate (P/E ratio) for the industry based upon either NSE or BSE data (which should be followed consistently and changes, if any, to be noted with proper justification thereof) shall be taken and discounted by 75% i.e. only 25% of the Industry Average P/E shall be taken as capitalization rate (P/E ratio). Earnings per share of the latest audited annual accounts will be considered for this purpose.

(d) The value as per the net worth value per share and the capital earning value calculated as above shall be averaged so as to arrive at the fair value per share.

Conditions:

(e) In case the EPS is negative, EPS value for that year shall be taken as zero for arriving at capitalized earning.

(f) In case where the latest balance sheet of the company is not available within nine months from the close of the year, unless the accounting year is changed, the shares of such companies shall be valued at zero.

(g) In case an individual security accounts for more than 5% of the total assets of the scheme, an independent valuer shall be appointed for the valuation of the said security.

"To determine if a security accounts for more than 5% of the total assets of the scheme, it should be valued by the procedure above and the proportion which it bears to the total net assets of the scheme to which it belongs would be compared on the date of valuation".

(h) If the networth of the company is negative, the share would be marked down to zero.

(i) All calculation as aforesaid shall be based on audited accounts.

(iii) Unlisted equity shares:

At the discretion of the AMC and with the approval of the Trustees, an unlisted equity share may be valued at a price discounted by 5%, price to be derived using above methodology.

In the event that an unlisted equity share is given due to merger of companies, the average cost of the existing company should continue in the new unlisted company and the last market price of the existing company should be considered for valuation of the new unlisted company till such time that the shares are listed.

(iv) Tracking mechanism for 'thinly' / 'non-traded' securities:

Fund has appointed an independent agency for providing the data for thinly traded / non-traded securities.

(v) Initial Public Offer / Anchor investments / Other Public Offers:

Stocks allotted under IPO / Anchor investments / Other Public Offers will be held at cost until listing.

B Compulsory Convertible debentures (CCD)

- (a) CCD shall be valued at the closing price available on the Primary Stock Exchange as on the valuation date.
- (b) When on a particular valuation day, CCD has not been traded on the Primary Stock Exchange; the value at which it is traded on the Secondary Stock Exchange will be considered.
- (c) When a CCD is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange or any other stock exchange, as the case may be, on the earliest previous day may be used provided such date is not more than 30 days prior to valuation date. If no price is available on any Stock Exchange for more than 30 days, then the security will be treated as a non-traded security and valued accordingly.

CCD with implicit characteristics of a debenture will be considered as a NCD and valued accordingly.

C Preference Shares

- (i) Preference shares are valued at cost till the time they are listed and traded on a stock exchange.
- (ii) The Preference shares when traded shall be valued at the closing price on the Primary Stock Exchange.
- (iii) When on a particular valuation day, a Preference share has not been traded on the Primary Stock Exchange; the value at which it is traded on the Secondary Stock Exchange will be used.
- (iv) When a Preference share is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange, as the case may be, on the earliest previous day may be used provided such date is not more than 30 days prior to valuation date. If no price is available on any Stock Exchange for more than 30 days, the Preference share will be valued at average cost.

D Warrants

- (i) Warrants are valued at the value of the shares which would be obtained on exercise of the warrants as reduced by the amount which would be payable on exercise of the warrant.
- (ii) The warrants when traded shall be valued at the closing price on the Primary Stock Exchange.
- (iii) When on a particular valuation day, a warrant has not been traded on the Primary Stock Exchange; the value at which it is traded on the Secondary Stock Exchange will be considered.

E Rights Shares

- (i) (a) Until they are traded, the value of the "rights" shares should be calculated as:

$$V_r = n/m \times (P_{ex} - P_{of})$$

Where V_r = Value of rights

n = no. of rights offered

m = no. of original shares held

P_{ex} = Ex-rights price

P_{of} = Rights Offer Price

- (ii) Where the rights are not treated pari-passu with the existing shares, suitable adjustment should be made to the value of rights. Where it is decided not to subscribe for the rights but to renounce them and renunciations are being traded, the rights can be valued at the renunciation value
- (iii) The rights when traded shall be valued at the closing price on the Primary Stock Exchange.
- (iv) When on a particular valuation day, the rights have not been traded on the Primary Stock Exchange; the value at which it is traded on the Secondary Stock Exchange will be considered.
- (v) When the underlying security is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the selected stock exchange, or any other stock exchange, as the case may be, on the earliest previous day may be used.

F Merger /Demerger

Merger

In case of merger, when company 'A' is merged with company 'B' and company 'B' continues to be listed, the proportionate shares allotted of 'B' company against company 'A' will be valued at the closing price of company 'B' on the stock exchange. The cost of company 'A' shares will be added to the cost of company 'B' shares.

In case of merger when company 'A' and company 'B' are merged to form company 'C', the value of unlisted company 'C' will be the total valuation price of company 'A' and company 'B' before the ex-date till the new entity company 'C' is listed and traded on a stock exchange. The cost of company 'A' and company 'B' shares will be added to derive the cost of company 'C' shares.

Demerger

In case where one entity is demerged into two or more entities and one of those entities continues to be listed, the value of unlisted entity will be calculated as the difference between the closing price of the security that continues to be listed on the ex-date (after demerger) and the previous trading day (before demerger). The difference in price of two dates will be the valuation price of the unlisted entity/entities proportionately, till they are listed and traded on a stock exchange. The

cost price of new entity/entities would be derived proportionately from the cost price of parent entity and the same will be kept constant until listing.

The benefit of this method of valuation is that it is not a subject matter and is determined based on the market price.

In case of a demerger in which the resultant security is the same as the base security, then the price of the base security will be considered.

On merger / demerger, in case the company specifies any regulations / method for cost bifurcation or valuation the same will be adopted. In case there are no details available by the company, the same will be valued at fair value as determined by the valuation committee.

G Stock Split/ Face value change

In case of stock split, the face value of a stock is reduced and proportionately number of shares is increased. The valuation price will be derived on the basis of the closing price before the ex-date and adjusted in proportion of stock split, till the new stock split shares are listed and traded on a stock exchange. The cost of one share will be proportionately adjusted in line with stock split change, to derive the new cost of share.

On stock split/face value change, in case the company specifies any regulations/ method for cost bifurcation or valuation the same will be adopted.

H Derivative Product – Index and Stock Futures

(1) Valuation of Traded Futures

Futures are valued at the closing price on the valuation day provided by the respective stock exchanges.

(2) Valuation of Non -Traded Futures

When the security is not traded on the respective stock exchange on the date of valuation, then the settlement price / any other derived price provided by the respective stock exchange will be used.

Derivative Product – Index and Stock Options

(1) Valuation of Traded Options

Options are valued at the closing price on the valuation day provided by the respective stock exchanges.

(2) Valuation of Non -Traded Options

When the security is not traded on the respective stock exchange on the date of valuation, then the settlement price / any other derived price provided by the respective stock exchange will be used.

I Partly / Fully Convertible debentures and bonds.

In respect of convertible debentures, the non-convertible and convertible components shall be valued separately. The non-convertible component should be valued on the same basis as would be applicable to a debt instrument. The convertible component should be valued on the same basis as would be applicable to an equity instrument. If, after conversion the resultant equity instrument would be traded pari passu with an existing instrument which is traded, the value of the latter instrument can be adopted during the period preceding the conversion. While valuing such instruments, the fact whether the conversion is optional should also be factored in.

II Debt Securities including Bills Rediscounting

A. Instruments having maturity upto 30 days

Assets other than TBILL, SDL and Government Securities to be valued by amortisation on a straight-line basis to maturity from initial purchase price / last valuation price whichever is first to face value as long as their valuation remains within +/- 0.025% band of the reference price received from valuation agencies. In case aggregated price is beyond 0.025% of the amortised price, the valuation shall be adjusted to bring it within the band of +/-0.025% from the aggregated price. The price from where the security is amortised will remain fixed and will be changed only if the entire portfolio has been sold and then a fresh purchase is carried out. Own trades will be not be considered for valuation.

B. Instruments having maturity greater than 30 days

Instruments having maturity greater than 30 days will be valued based on the Average of security level prices obtained from valuation agencies. If no price is provided by valuation agencies on the first day of purchase of an instrument having maturity greater than 30 days, the same will be valued at purchase yield, till such time the scrip level price is provided by the rating agencies.

Waterfall mechanism for valuation of money market and debt securities to be used by the valuation agencies

The waterfall mechanism for valuation of money market and debt securities to be used by valuation agencies as per SEBI circular no. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated 24 September 2019 and AMFI circular no. 135/ BP/ 83/ 2019-20 dated 18 November 2019 is given in the enclosed Annexure.

Polling process by valuation agencies

The polling process by valuation agencies as per SEBI circular no. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated 24 September 2019 and AMFI circular no. 135/ BP/ 83/ 2019-20 dated 18 November 2019 is given in the enclosed Annexure.

C. Other Instruments:

- a) Investments in short-term deposits with banks (pending deployment) and repurchase (repo) transactions (including tri-party repo i.e. (TREPS) with tenure of upto 30 days, shall be valued on cost plus accrual basis.

The interest accruals / amortisation on the above instruments will be booked separately as income.

D. Guidelines for inter-scheme transfer of debt and money market instruments:

Inter Scheme Transfer

Inter scheme transfers will now be carried out as per the guidelines prescribed by SEBI as follows:

1. AMC's shall seek prices for IST of any money market or debt security (irrespective of maturity), from the valuation agencies.
2. The valuation agencies shall provide these prices to all AMC's irrespective whether they have asked for it or not twice a day at pre-agreed time.
3. If prices from both the valuation agencies are received, an average of the prices so received shall be used for IST pricing.
4. If price from only one valuation agency is received, that price may be used for IST pricing.
5. If prices are not received from any of the valuation agencies, AMC's may determine the price for the IST, in accordance with Clause 3 (a) of Seventh Schedule of SEBI (Mutual Funds) Regulations, 1996, which is given below.

If prices are not received from any agency, the below methodology will be used to carry out inter scheme transfers:

The traded price of the same or similar securities available on public platform before concluding inter scheme transfers should be verified. All inter-scheme transfer shall be done at weighted average YTM. Trades shall be spooled only after 12.00 p.m. reported on the public platform to be considered for inter scheme of any debt and money market instrument, after excluding any abnormal trades reported.

The weighted average YTM will be used only if the following criteria's are met:

For securities having maturity upto 1 year:

All trades with minimum traded lot of INR 25 crores of face value or more will be aggregated for same or similar security on a public platform

For securities having maturity of more than 1 year:

All trades with minimum traded lot of INR 5 crores of face value or more will be aggregated for same or similar security on a public platform.

In case a closed ended scheme is in need of liquidity for making payment of expenses only, where value of inter-scheme transfer will be upto 2 crores, above volume condition will not be applicable and price of a single trade in same or similar security irrespective of the volume will be considered for inter-scheme.

If same or similar security on a public platform is not available at the time of inter-scheme, previous day closing price would be used for valuation or any other method as may be approved by the valuation committee.

Criteria for identifying the similar securities:

For the purpose of valuation, similar security shall be identified by the following means:

[i] Securities having maturity upto 30 days:

1. Same issuer having maturity within +/- 15 days
2. In case of Private Bank CDs and CPs and NCDs issued by NBFC, manufacturing companies and PSUs:
 - Having long term rating of AAA and AA+ and short term rating of A1+ will be considered as comparable.
 - Having long term rating of AA and AA- and short term rating of A1+ will be considered as comparable.

Securities having maturity within a period of +/- 15 days same calendar quarter* fulfilling the above criteria would be considered.

[ii] Securities having maturity of more than 30 days:

1. Same issuer
2. Similar short term and long term rating
3. Similar industry
We will classify the same into three sectors Banking, Manufacturing and Non-Banking Finance Companies (NBFC). Bank CDs will be inter-schemed against bank CDs (within bank CDs PSU CDs will be compared to PSU CDs and Private / Foreign bank CDs will be compared to Private / Foreign bank CDs, Manufacturing papers will be inter schemed against manufacturing papers and NBFC will be inter schemed against NBFC.
4. Similar characteristics e.g. Floating rate paper will be compared with another floating rate paper only
5. Maturity near to the maturity of the security being transferred as mentioned in the table below:

Sr. No.	Maturity of Security being transferred	Maturity of the benchmark security
1	Between 31 days to 91 days maturity	+/- 15 days from the maturity of security transferred provided the benchmark security is maturing in the same calendar quarter*
2	between 92 days to 365 days	+/-45 days from the maturity of security transferred
3	above 365 days - 1 - 3 Years - 3 years and above	+/- 06 months from the maturity of security transferred +/- 12 months from the maturity of security transferred

*For example, if a security maturing on 28th June has to be transferred on 20th of June and traded price of 3rd July is available, It can never be fairly priced for inter-scheme because the yields of 28th June paper and 3rd July paper will be different. Today the yield of 28th June paper in market is 8.50% and that of 3rd July paper is 9.30%. Thus, in case the above safeguard is not incorporated the inter-scheme can happen at wrong prices. This happens at every quarter end.

Notes:

- a. Public Platform refers to FTRAC / FIMMDA for commercial papers or certificate of deposits and NSE / BSE for corporate bonds / debentures (including securitized assets) and any other platform as available from time to time as may be notified. For Treasury bills and Government securities, it refers to NDS OM.
- b. Units / shares of mutual funds will be valued at the last published NAV.
- c. Weighted average YTM shall be rounded up to two digits after decimal point.
- d. Outlier trades, if any, shall be ignored after suitable justification by Fund Managers is provided.

E. SOVERIGN SECURITIES

Government Securities (GSec), State Development Loans (SDL) , Uday Bonds (UB) Treasury Bills (TBills) and Cash Management Bills (CMB):

GSec SDL, UB, T Bills and CMB will be valued based on the aggregated prices provided by CRISL and ICRA.

F. Valuation of money market and debt securities which are rated below investment grade:

All money market and Debt Securities below investment grade (i.e. if the long term rating of the security issued by a SEBI registered Credit Rating agency (CRA) is below BBB- or if the short term rating of the security is below A3) and "Default" security shall be valued at a aggregated price provided by the Valuation Agencies.

Till such time the valuation agencies compute the valuation of money market and debt securities classified as below investment grade, such securities shall be valued on the basis of indicative haircuts provided by these agencies. These indicative haircuts shall be applied on the date of credit event i.e. migration of the security to sub-investment grade and shall continue till the valuation agencies compute the valuation price of such securities. Further, these haircuts shall be updated and refined, as and when there is availability of material information which impacts the haircuts.

AMCs may deviate from the indicative haircuts and/or the valuation price for money market and debt securities rated below investment grade provided by the valuation agencies subject to the following:

- The detailed rationale for deviation from the price post haircuts or the price provided by the valuation agencies shall be recorded by the AMC.
- The rationale for deviation along-with details such as information about the security (ISIN, issuer name, rating etc.), price at which the security was valued vis-a-vis the price post haircuts or the average of the price provided by the valuation agencies (as applicable) and the impact of such deviation on scheme NAV (in

amount and percentage terms) shall be reported to the Board of AMC and Trustees.

- The rationale for deviation along-with details as mentioned above shall also be disclosed to investors. In this regard, all AMCs shall immediately disclose instances of deviations under a separate head on their website. Further, the total number of such instances shall also be disclosed in the monthly and half-yearly portfolio statements for the relevant period along-with an exact link to the website wherein the details of all such instances of deviation are available.

G. Inflation Index Bonds:

Inflation Index Bonds will be valued based on the aggregated prices provided by valuation agencies.

H. Interest Rate Futures:

The exchange traded Interest Rate Futures would be valued based on the Daily settlement price or any other derived price provided by the exchange.

I. Interest Rate Swaps:

Interest Rate Swaps would be priced as per the valuation provided by the calculation agent as per the agreed terms of such contract. Essentially such prices would be NPV after discounting the future cash flows by and OIS rate provided by authorised agencies like FBIL or service providers like Bloomberg / Reuters.

J. Commodities:

Exchange Traded Commodities – Futures and Options:

- For the purpose of valuation, TAML has adopted Multi Commodity Exchange (MCX) as the Primary Stock Exchange and National Commodity Derivative Exchange (NCDEX) as the Secondary Stock Exchange. However, other commodity / stock exchange like National Stock Exchange (NSE), Bombay Stock Exchange (BSE) and Indian Commodity Exchange Limited (ICEX) are to be considered as subsequent commodity / stock exchanges.
- The securities / Commodities shall be valued at the closing price on the traded Primary Stock Exchange.
- On a valuation day, if a security has not been traded on the Primary Stock Exchange, the value at which it is traded on the Secondary Stock Exchange will be considered.
- When a security is not traded on any stock exchange on a particular valuation day, the value at which it was traded on the primary stock exchange or any other stock exchange, as the case may be, on the earliest previous day may be used provided such date is not more than 30 days prior to valuation date. If no price is available on any Stock Exchange for more than 30 days, then the security will be treated as a non-traded security and valued accordingly.

Other than exchange traded commodities (physical):

Upon the receipt of physical stocks at the exchange accredited warehouse in the allocated location the commodity can be valued daily. The pooled physical price of the respective location is published by the respective commodity exchanges. Example: Pooled price of Gold ex-Ahmedabad is published by 12:00 noon everyday at the MCX website which can be referred for valuation of stocks lying in Ahmedabad warehouse / designated vaults under TAML MF Schemes. These published prices will be considered to valuation.

III Foreign Securities

1 Includes

- (a) ADRs/ GDRs issued by Indian or foreign companies
- (b) Equity of overseas companies listed on recognized stock exchanges overseas
- (c) Initial and follow on public offerings for listing at recognized Stock Exchanges Overseas
- (d) Foreign debt securities in the countries with fully convertible currencies, short term as well as long term debt instruments with rating not below investment grade by accredited/registered credit rating agencies.
- (e) Money market instruments rated not below investment grade.
- (f) Repos in the form of investment, where the counterparty is rated not below investment grade; repos should not however, involve any borrowing of funds by mutual funds.
- (g) Government securities where the countries are rated not below investment grade.
- (h) Derivatives traded on recognized stock exchanges overseas only for hedging and portfolio balancing with underlying as securities
- (i) Short term deposits with banks overseas where the issuer is rated not below investment grade
- (j) Units/securities issued by overseas mutual funds or unit trusts registered with overseas regulators and investing in (a) aforesaid securities, (b) Real Estate Investment Trusts (REITs) listed in recognized stock exchanges overseas or (c) unlisted overseas securities (not exceeding 10% of their net assets).
- (k) Overseas Exchange Traded Funds (ETFs).

2. Valuation of Foreign Securities

Valuation of traded securities:

On the valuation day, the securities issued outside India and listed on the stock exchanges outside India shall be valued at the closing price on the stock exchange at which it is listed or at the last traded price reported on Bloomberg or Reuter's terminal between 4 p.m. to 5 p.m. on the valuation day. However, in case a security is listed on more than one stock exchange, TAML reserves the right to determine the stock exchange, the price of which would be used for the purpose of valuation of that security.

Valuation of non-traded securities:

In case any particular security is not traded on the Valuation Day, the same shall be valued 'in good faith' by TAML on the basis of the valuation principles laid down by SEBI.

TAML invests in Units of overseas mutual fund scheme (Offshore Units). Such offshore units shall be valued at last available Net Asset Value (less exit charge if applicable).

On the valuation day, prices in foreign currency will be valued in Indian Rupees at the RBI reference rate as at the close of banking hours on that day in India.

IV Investment in Mutual Fund Units

As per guidelines issued by AMFI, Mutual Fund Units listed and traded on exchanges (NSE & BSE) would be valued at the closing traded price as on the valuation date.

Unlisted Mutual Fund Units and listed but not traded Mutual Fund Units will be valued at the NAV as on the valuation day.

Overseas Mutual Fund units would be valued at the NAV as on the valuation day.

V Investment in REITs, InvITs

On the valuation day, at the last quoted closing price on the NSE / BSE or any other stock exchange, where such security is listed. If it's not traded on the primary stock exchange which is NSE then the closing traded price on BSE or than on any other stock exchange will be considered. In case if it's not traded on any exchange on any valuation day, the valuation committee would recommend appropriate valuation methodology to determine the fair value.

Abnormal situations & market disruptions:

In normal situations the above methods may be used for valuation. However, in abnormal market conditions, due to lack of market trading or otherwise it may not be possible to obtain fair valuation using "normal" means. In such situations, the realizable value may be substantially different from the benchmark-based prices obtained. This could lead to, for example, an overvalued portfolio which could be used by some investors to redeem their holdings having an adverse impact on residual investors.

As by definition, abnormal events are abnormal, no prescriptive guidelines are proposed to value securities / portfolios during such events. Following type of events could be classified as exceptional events where current market information may not be available / sufficient for valuation of securities:

- 1) Major policy announcements by RBI or Central / State Government or SEBI or any other regulatory related event.
- 2) Unproportionate large redemptions.
- 3) Natural disasters, public disturbances, riots, war, global events etc. that may force the markets to close unexpectedly or not function normally.

- 4) Significant volatility in the stock markets
- 5) Events which lead to lack of availability of accurate or sufficient information to value the securities.

The above mentioned list is only indicative and may not reflect all the possible exceptional events / circumstances. In case of exceptional events / circumstances, the valuation committee shall assess the situation and recommend appropriate method of valuation of the impacted securities.

Deviations:

The investments of TMF schemes shall be valued as per the methodologies mentioned in this Valuation Policy, which shall endeavor true and fairness in valuing them. However, if the valuation of any particular security does not result in a fair valuation, the Valuation Committee would have the right to deviate from the established policies in order to value the security at fair value.

Deviations from the valuation policy and principles, if any, will be informed to the AMC and Trustee Boards alongwith detailed rationale. This information will also be displayed on our website and will be disclosed in the monthly and half yearly portfolio statements.

Conflict of interest:

In case if any situation arises that leads to conflict of interest, the same shall be raised to the Valuation Committee and the Committee shall endeavor to resolve the same such that the valuation provides for fair treatment to all investors including existing and prospective investors.

Audit review:

The valuation policies and procedures shall be reviewed yearly by the internal auditors to ensure their continued appropriateness.

Applicable with effect from 2 March 2020.

Annexure to the Valuation Policy

Part A: Valuation of Money Market and Debt Securities other

than G-Secs 1. Waterfall Mechanism for valuation of money

market and debt securities:

The following shall be the broad sequence of the waterfall for valuation of money market and debt securities:

- i. Volume Weighted Average Yield (VWAY) of primary reissuances of the same ISIN (whether through book building or fixed price) and secondary trades in the same ISIN
- ii. VWAY of primary issuances through book building of same issuer, similar maturity (Refer Note 1 below)
- iii. VWAY of secondary trades of same issuer, similar maturity
- iv. VWAY of primary issuances through fixed price auction of same issuer, similar maturity
- v. VWAY of primary issuances through book building of similar issuer, similar maturity (Refer Note 1 below)
- vi. VWAY of secondary trades of similar issuer, similar maturity.
- vii. VWAY of primary issuance through fixed price auction of similar issuer, similar maturity
- viii. Construction of matrix (polling may also be used for matrix construction)
- ix. In case of exceptional circumstances, polling for security level valuation (Refer Note 2 below)

Note 1

Except for primary issuance through book building, polling shall be conducted to identify outlier trades. However, in case of any issuance through book building which is less than INR 100 Cr, polling shall be conducted to identify outlier trades.

Note 2

Some examples of exceptional circumstance would be stale spreads, any event/news in particular sector/issuer, rating changes, high volatility, corporate action or such other event as may be considered by valuation agencies. Here stale spreads are defined as spreads of issuer which were not reviewed/updated through trades/primary/polls in same or similar security/issuers of same/similar maturities in waterfall approach in last 6 months.

Further, the exact details and reasons for the exceptional circumstances which led to polling shall be documented and reported to AMCs. Further, a record of all such instances shall be maintained by AMCs and shall be subject to verification during SEBI inspections.

Note 3

All trades on stock exchanges and trades reported on trade reporting platforms till end of trade reporting time (excluding Inter-scheme transfers) should be considered for valuation on that day.

Note 4

It is understood that there are certain exceptional events, occurrence of which during market hours may lead to significant change in the yield of the debt securities. Hence, such exceptional events need to be factored in while calculating the price of the securities. Thus, for the purpose of calculation of VWAY of trades and identification of outliers, on the day of such exceptional events, rather than considering whole day trades, only those trades shall be

The following events would be considered exceptional events:

i.	Monetary/Credit Policy
ii.	Union Budget
iii.	Government Borrowing/ Auction Days
iv.	Material Statements on Sovereign Rating
v.	Issuer or Sector Specific events which have a material impact on yields
vi.	Central Government Election Days
vii.	Quarter end days

considered which have occurred post the event (on the same day).

In addition to the above, valuation agencies may determine any other event as an exceptional event. All exceptional events along-with valuation carried out on such dates shall be documented with adequate justification.

2. Definition of tenure buckets for Similar Maturity

When a trade in the same ISIN has not taken place, reference should be taken to trades of either the same issuer or a similar issuer, where the residual tenure matches the tenure of the bond to be priced. However, as it may not be possible to match the exact tenure, it is proposed that tenure buckets are created and trades falling within such similar maturity be used as per table below.

¹ Residual Tenure of Bond to be priced	Criteria for similar maturity
Upto 1 month	Calendar Weekly Bucket
Greater than 1 month to 3 months	Calendar Fortnightly Bucket
Greater than 3 months to 1 year	Calendar Monthly Bucket
Greater than 1 year to 3 years	Calendar Quarterly Bucket
Greater than 3 years	Calendar Half Yearly or Greater Bucket

In addition to the above:

- a. In case of market events, or to account for specific market nuances, valuation agencies may be permitted to vary the bucket in which the trade is matched or to split buckets to finer time periods as necessary. Such changes shall be auditable. Some examples of market events / nuances include cases where traded yields for securities with residual tenure of less than 90 days and more than 90 days are markedly different even though both may fall within the same maturity bucket, similarly for less than 30 days and more than 30 days or cases where yields for the last week v/s second last week of certain months such as calendar quarter ends can differ.

- b. In the case of illiquid/ semi liquid bonds, it is proposed that traded spreads be permitted to be used for longer maturity buckets (1 year and above). However, the yield should be adjusted to account for steepness of the yield curve across maturities.
- c. The changes / deviations mentioned in clauses a and b, above, should be documented, along with the detailed rationale for the same. Process for making any such deviations shall also be recorded. Such records shall be preserved for verification.

3. Process for determination of similar issuer

Valuation agencies shall determine similar issuers using one or a combination of the following criteria. Similar issuer do not always refer to issuers which trade at same yields, but may carry spreads amongst themselves & move in tandem or they are sensitive to specific market factor/s hence warrant review of spreads when such factors are triggered.

- i. Issuers within same sector/industry and/or
- ii. Issuers within same rating band and/or
- iii. Issuers with same parent/ within same group and/or
- iv. Issuers with debt securities having same guarantors and/or
- v. Issuers with securities having similar terms like Loan Against Shares (LAS)/ Loan Against Property (LAP)

The above criteria are stated as principles and the final determination on criteria, and whether in combination or isolation shall be determined by the valuation agencies. The criteria used for such determination should be documented along with the detailed rationale for the same in each instance. Such records shall be preserved for verification. Similar issuers which trade at same level or replicate each other's movements are used in waterfall approach for valuations. However, similar issuer may also be used just to trigger the review of spreads for other securities in the similar issuer category basis the trade/news/action in any security/ies within the similar issuer group.

4. Recognition of trades and outlier criteria

i. Volume criteria for recognition of trades (marketable lot)

Paragraph 1.1.1.1(a) of SEBI vide circular no. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated September 24, 2019 on Valuation of money market and debt securities, prescribes that the marketable lots shall be defined by AMFI, in consultation with SEBI. In this regard, marketable lot is defined as under. The following volume criteria shall be used for

Parameter	Minimum Volume Criteria for marketable lot
Primary	INR 25 cr for both Bonds/NCD/CP/ CD and other money market instruments
Secondary	INR 25 cr for CP/ CD, T-Bills and other money market instruments
Secondary	INR 5 Cr for Bonds/NCD/ G-secs

Trades not meeting the minimum volume criteria i.e. the marketable lot criteria as stated above shall be ignored.

recognition of trades by valuation agencies:

ii. Outlier criteria

It is critical to identify and disregard trades which are aberrations, do not reflect market levels and may potentially lead to mispricing of a security or group of securities. Hence, the following broad principles would be followed by valuation agencies for determining outlier criteria.

- a. Outlier trades shall be classified on the basis of liquidity buckets (Liquid, Semi-liquid, Illiquid). Price discovery for liquid issuers is generally easier than that of illiquid issuers and hence a tighter pricing band as compared to illiquid issuers would be appropriate.
- b. The outlier trades shall be determined basis the yield movement of the trade, over and above the yield movement of the matrix. Relative movement ensures that general market movements are accounted for in determining trades that are outliers. Hence, relative movement over and above benchmark movement shall be used to identify outlier trades.
- c. Potential outlier trades which are identified through objective criteria defined above will be validated through polling from market participants. Potential outlier trades that are not validated through polling shall be ignored for the purpose of valuation.
- d. The following criteria shall be used by valuation agencies in determining Outlier Trades

Liquidity Classification	Bps Criteria (Yield movement over Previous Day yield after accounting for yield movement of matrix)		
	Upto 15 days	15-30 days	Greater than 30 days
Liquid	30 bps	20 bps	10 bps
Semi-liquid	45 bps	35 bps	20 bps
Illiquid	70 bps	50 bps	35 bps

The above criteria shall be followed consistently and would be subject to review on a periodic basis by valuation agencies and any change would be carried in consultation with AMFI.

- e. In order to ensure uniform process in determination of outlier trades the criteria for liquidity classification shall be as detailed below.

Liquidity classification criteria — Liquid, semi-liquid and Illiquid definition

Valuation agencies shall use standard criteria for classifying trades as Liquid, Semi-Liquid and illiquid basis the following two criteria

- a. Trading Volume
- b. Spread over reference yield

Such criteria shall be reviewed on periodic basis in consultation

with AMFI. **Trading Volume (Traded days) based criteria:**

Number of unique days an issuer trades in the secondary market or issues a new security in the primary market in a calendar quarter

- Liquid -> >=50% of trade days
- Semi liquid-* >=10% to 50% trade days
- Illiquid-> <10 % of trade days

Spread based criteria:

Spread over the matrix shall be computed and based on thresholds defined, issuers shall be classified as liquid, semi liquid and illiquid. For bonds thresholds are defined as upto 15 bps for liquid; >15-75 bps for semi-liquid; > 75 bps for illiquid. (Here, spread is computed as average spread of issuer over AAA Public Sector Undertakings/Financial Institutions/Banks matrix), For CP/ CD- upto 25 bps for liquid; >25-50 bps for semiliquid; > 50 bps for illiquid. (Here, spread is computed as average spread of issuer over A1+/AAA CD Bank matrix).

The thresholds shall be periodically reviewed and updated having regard to the market. The best classification (liquid being the best) from the above two criteria (trading volume and spread based) shall be considered as the final liquidity classification of the issuer. The above classification shall be carried out separately for money market instruments (CP/ CDs) and bonds.

5. Process for construction of spread mix

Valuation agencies shall follow the below process in terms of calculating spreads and constructing the matrix:

Steps	Detailed Process
Step 1	Segmentation of corporates – The entire corporate sector is first categorised across following four sectors i.e. all the corporates will be catalogued under one of the below mentioned bucket: <ol style="list-style-type: none">1. Public Sector Undertakings/Financial Institutions/Banks;2. Non-Banking Finance Companies -except Housing Finance Companies;3. Housing Finance Companies;4. Other corporates
Step 2	Representative issuers – For the aforesaid four sectors, representative issuers (Benchmark Issuers) shall be chosen by the valuation agencies for only higher rating {I.e. "AAA" or AA+}. Benchmark/Representative Issuers will be identified basis high liquidity, availability across tenure in AAA/AA+ category and having lower credit/liquidity premium. Benchmark Issuers can be single or multiple for each sector. It may not be possible to find representative issuers in the lower rated segments, however in case of any change in spread in a particular rating segment, the spreads in lower rated segments should be suitably adjusted to reflect the market conditions. In this respect, in case spreads over benchmark are widening at a better rated segment, then adjustments should be made across lower rated segments, such that compression of spreads is not seen at any step. For instance, if there is widening of spread of AA segment over the AAA benchmark, then there should not be any compression in spreads between AA and A rated segment and so on.
Step 3	Calculation of benchmark curve and calculation of spread – <ol style="list-style-type: none">1. Yield curve to be calculated for representative issuers for each sector for maturities ranging from 1 month till 20 years and above.2. Waterfall approach as defined in Part A (1) above will be used for construction of yield curve of each sector.3. In the event of no data related to trades/primary issuances in the securities of the

Steps	Detailed Process
	<p>representative issuer is available, polling shall be conducted from market participants</p> <p>4. Yield curve for Representative Issuers will be created on daily basis for all 4 sectors. All other issuers will be pegged to the respective benchmark issuers depending on the sector, parentage and characteristics. Spread over the benchmark curve for each security is computed using latest available trades/primaries/polls for respective maturity bucket over the Benchmark Issuer.</p> <p>5. Spreads will be carried forward in case no data points in terms of trades/primaries/polls are available for any issuer and respective benchmark movement will be given</p>
Step 4	<p>1. The principles of VWAY, outlier trades and exceptional events shall be applicable while constructing the benchmark curve on the basis of trades/primary issuances.</p> <p>2. In case of rating downgrade/credit event/change in liquidity or any other material event in Representative Issuers, new Representative Issuers will be identified. Also, in case there are two credit ratings, the lower rating to be considered.</p> <p>3. Residual tenure of the securities of representative issuers shall be used for construction of yield curve.</p>

Part B : Valuation of G-Secs (T-Bill, Cash management bills, G-Sec and SDL)

The following is the waterfall mechanism for valuation of Government securities:

- VWAY of last one hour, subject to outlier validation
- VWAY for the day (including a two quote, not wider than 5 bps on NDSOM), subject to outlier validation
- Two quote, not wider than 5 bps on NDSOM, subject to outlier validation
- Carry forward of spreads over the benchmark
- Polling etc.

Note:

1. VWAY shall be computed from trades which meet the marketable lot criteria stated in Part A of these Guidelines.
2. Outlier criteria: Any trade deviating by more than +/- 5 bps post factoring the movement of benchmark security shall be identified as outlier. Such outlier shall be validated through polling for inclusion in valuations. If the trades are not validated, such trades shall be ignored.

II. AMFI GUIDELINES ON POLLING PROCESS FOR MONEY MARKET AND DEBT SECURITIES

Please refer to Paragraph 2.2.5 of SEBI vide circular no. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated September 24, 2019 on Valuation of money market and debt securities, which prescribes that considering the importance of polling in the valuation process, guidelines shall be issued by AMFI on polling by valuation agencies and on the responsibilities of Mutual Funds in the polling process, as part of the waterfall approach for valuation of money market and debt securities. In this regard, the following Guidelines were approved by the Board of AMFI, in consultation with SEBI.

Polling Guidelines:

- 11 Valuation agencies shall identify the Mutual Funds who shall participate in the polling process on a particular day, taking into account factors such as diversification of poll submitters and portfolio holding of the Mutual Funds. Mutual Funds who are identified by the valuation agencies shall necessarily participate in the polling process. However, in case any Mutual Fund does not participate in the polling process, detailed reason for the same shall be recorded at the time and subsequently made available during SEBI inspections. In this respect, since a Mutual Fund may have investments in similar securities, a security not forming part of investment universe may not be considered as an adequate reason for not participating in the polling process.
2. Polling will be carried out on a daily basis by the valuation agencies, in terms of points 9-11 below.
3. Each valuation agency needs to take polls from at least 5 unique Mutual Funds on a daily basis. Hence, between the two valuation agencies 10 unique Mutual Funds to be polled. They may cover more Mutual Funds, over and above this. For benchmark securities a poll constituting at least 5 responses will be considered as valid. In case of non-benchmark securities a poll constituting at least 3 responses will be considered as valid. The responses received by each valuation agency will be shared with the other agency also.
4. Median of polls shall be taken for usage in valuation process.
5. The valuation agencies will also need to cover as many non- Mutual Fund participants as possible, over and above the Mutual Funds, to improve on the polling output quality.
6. Endeavour would be made to have adequate representation of both holders and non-holders of the same bond/same issuer for non-benchmark securities in the poll process. Where this is not possible, valuation agencies may seek polls from holders of bonds with a similar structure.
7. In the case of issuers with multiple notch rating upgrades / downgrades over short periods of time, valuation agencies shall:
 - a. Conduct polls with a larger universe of pollers.
 - b. Increase the frequency of polling
8. Suo moto feedback on valuations should be entertained only through formal mails from persons designated by AMC for said purpose, and the same shall be validated through repolling. Any such feedback shall be duly recorded by the valuation agencies, including the reason for the challenge, results of repolling and subsequent changes in valuation on repolling, if any. Such records shall be preserved by the valuation agencies, for verification.
9. Polling will be done for two sets of securities, Benchmark & Others.

10. Benchmark will be defined for the following categories across tenors.
 - a) Treasury Bills
 - b) Central Government Securities

 - c) State Government Securities
 - d) AAA PSU / PFI / PSU Banks
 - e) AAA Private
 - f) NBFC
 - g) HFC
 - h) Any other as required for improving fair valuations*

11. Polling shall be conducted in the following two scenarios:
 - a) Validation of traded levels if they are outlier trades.
 - b) Non traded Securities (in exceptional circumstances as defined in the waterfall mechanism for valuation of money market and debt securities).

12. Best efforts should be made by poll submitters to provide fair valuation of a security.

13. The polling process will be revalidated by external audit of the valuation agencies with at least an annual frequency

14. AMCs shall have a written policy, approved by the Board of AMC and Trustees, on governance of the polling process. The aforesaid policy shall include measures for mitigation of potential conflicts of interest in the polling process and shall identify senior officials, with requisite knowledge and expertise, who shall be responsible for polling. Further, the policy should outline the following aspects.
 - a. the process of participating in a polling exercise.
 - b. identify the roles and responsibilities of persons participating in the polling.
 - c. include policies and procedures for arriving at the poll submission
 - d. cover the role of the Board of AMC and Trustees, and the periodic reporting that needs to be submitted to them.
 - e. All polling should be preferably over email. In case for any reason, the polling is done by way of a telephonic call then such a call should be over recorded lines, followed subsequently by an email.
 - f. AMCs should have adequate business continuity arrangements for polling, with the necessary infrastructure / skill to ensure that consistent delivery of poll submissions is made without material interruption due to any failure, human or technical.

15. All polling done will have to be documented and preserved in format approved by the Board of AMC, for a period of eight years, along-with details of the basis of polling (such as market transactions, market quotes, expert judgement etc.).

16. AMCs shall ensure that participation in the polling process is not mis-used to inappropriately influence the valuation of securities. The officials of the AMC who are

responsible for polling in terms of point no. 14 above, shall also be personally liable for any misuse of the polling process.

17. AMC's shall maintain an audit trail for all polls submitted to valuation agencies.

The above Guidelines shall be effective within 90 days from the date of issue of AMFI circular dated 18 November 2019.