

Invesco Mutual Fund

INVESTMENT VALUATION POLICY & PROCEDURE

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1. Introduction:

The Securities and Exchange Board of India (SEBI) has outlined investment valuation norms and accounting policies under SEBI (Mutual Funds) Regulations, 1996 ('**MF Regulations**') as amended from time to time. The Investment Valuation Norms are prescribed in the Eighth Schedule of the regulations and circulars / guidelines issued by SEBI from time to time. Regulation 25(19) of MF Regulations mandate that AMC shall compute and carry out valuation of investments of its mutual fund schemes in accordance with the investment valuation norms specified in Eighth Schedule of MF Regulations.

SEBI vide its Gazette Notification No. LAD-NRO/GN/2011-12/38/4290 dated February 21, 2012 has introduced overarching '**Principles of Fair Valuation**' in Eighth Schedule of the MF Regulations by amending Investment Valuation norms. SEBI has directed that a Mutual Fund should value its investments in good faith and true and fair manner so as to reflect realizable value of the securities / assets and to ensure fair treatment to all investors including existing investors as well as investors seeking to purchase or redeem units of mutual funds in all schemes at all points of time. In the event of conflict of interest between the principles of fair valuation and valuation guidelines prescribed by SEBI, the principles of fair valuation shall prevail. Further SEBI vide Circular dated September 24, 2019 also mandated that waterfall approach for valuation of debt and money market instruments followed by the Valuation Agencies for arriving at security level pricing shall also form part of valuation policy.

Further, AMFI has issued best practice guidelines circular no.135/BP/29/2012-13 dated May 15, 2012 on valuation methodology for valuing Debt and Money Market instruments thereby providing guiding principle for valuation. AMFI vide its circular dated November 18, 2019 has also prescribed waterfall mechanism to be followed by Valuation Agencies for valuation of money market and debt securities.

Accordingly, Invesco Asset Management (India) Private Limited ("**AMC**") has framed a policy on valuation of securities and assets held by Invesco Mutual Fund to ensure fair valuation of all securities and assets as prescribed in **Annexure I** hereunder.

2. Objectives:

The objective of the Valuation Policy and Procedure ("**Policy**") adopted by the AMC on valuation of securities and assets held by Invesco Mutual Fund is to:

- prescribe the methodology and the manner in which securities and assets held by the schemes of Invesco Mutual Fund should be valued;
- ensure that securities / assets are valued accurately and consistently as per approved methodology;
- ensure appropriateness and accuracy of methodologies used in valuing securities / assets of the schemes and their effective implementation;
- lay down the process to deal with exceptional circumstances / events;
- address the instances of conflict of interest, if any;

- set a process to detect and prevent incorrect valuation;
- ensure transparency through appropriate disclosures.

Thus, the primary objective is to value investments in a manner so as to reflect realizable value of the securities / assets and to ensure fair treatment to all investors including existing investors as well as investors seeking to purchase or redeem units of Invesco Mutual Fund in all schemes.

3. Valuation Methodologies:

- i. Detailed methodologies for valuing each and every type of securities and assets held by the various schemes of Invesco Mutual Fund are prescribed in **Annexure I** hereunder.
- ii. Investment in new type of security/asset shall be made only after establishment of the valuation methodology for such security/asset with the approval of the Board of the AMC.

4. Exceptional Events:

Following are the illustrative types of events which could be classified as exceptional events where current market information may not be available / reliable / sufficient for valuation of securities and assets held by schemes of Invesco Mutual Fund:

- i. Major policy announcements by Reserve Bank of India, the Government or SEBI including the monetary policy, budget or other regulatory related events;
- ii. Natural disasters or public disturbances that force the markets to close unexpectedly;
- iii. Significant volatility in the capital / currency / debt markets;
- iv. Liquidity stress in the system;
- v. War;
- vi. Valuation Agencies do not provide Valuation for Securities;
- viii. Other external factors which may be defined by the Valuation Committee from time to time.

Considering the exceptional nature of events, it is not possible to cover all the potential exceptional events above and to define a standard methodology to be adopted for fair valuation of securities for such events. The Board of AMC and Trustee authorized the Valuation Committee to determine the exceptional events and the process to deal with the same, under guidance of Board of AMC and Trustee, wherever required / possible and get the same ratified subsequently.

5. Deviation from the Policy, if any:

AMC will strictly adhere to the valuation norms stated hereunder. However, the Valuation Committee is authorized to approve deviation from the policy, if any, only for the purpose of

ensuring true, fair & correct valuation of referred security / asset. Such deviation shall be reported to the Board of AMC & Trustees with appropriate supporting and disclosed to Investors appropriately on the AMC's website (www.invescomutualfund.com) and / or any other means of communication as may be decided by the AMC.

6. Conflict of Interest:

In case any instance of conflict of interest arises, the same shall be referred to the Valuation Committee. The Valuation Committee shall review the same and address the issue of conflict of interest in such a manner so as to ensure fair treatment to all investors in the schemes of Invesco Mutual Fund and therein recommend changes, if any, in policy/methodology. The same shall be ratified by the Board of AMC & Trustees.

7. Record Maintenance:

The documentation of rationale for valuation including inter scheme transfers shall be maintained and preserved for a period as per regulation 50 of SEBI (Mutual Funds) Regulations, 1996 (i.e. currently eight years) to enable audit trail.

8. Detection & Prevention of Incorrect Valuation:

The Internal Auditor will review the valuation policy and process of valuation of securities in order to detect & prevent incorrect valuation periodically.

9. Periodic review:

- Valuation Policy shall be updated upon changes in the Regulations/ Practices and such changes shall be approved by the Valuation Committee.
- The policy shall be reviewed by the Valuation Committee and the Internal Auditor at periodic intervals to ensure the appropriateness and accuracy of methodologies used and its effective implementation in valuing securities / assets. The valuation committee of the AMC is constituted of Chief Executive Officer, Head - Equity, Head - Fixed Income, Chief Operating Officer & Chief Financial Officer and Head - Compliance & Risk Management.
- The updated Valuation Policy shall be placed before the Board of AMC and Trustee on annual basis or such other intervals as maybe directed by the Boards.
- The Valuation Policy and Procedures shall be reviewed by the Statutory Auditors at least once in a financial year.

10. Disclosure:

The Valuation Policy shall be disclosed in Statement of Additional Information and shall also be uploaded on the website of AMC / Fund (www.invescomutualfund.com) to ensure transparency of valuation norms to be adopted by AMC.

Annexure I

VALUATION NORMS FOR SECURITIES / ASSETS

A. Equity and Equity Related Securities:

1	Traded: Equity and Equity Related Securities (Including Redeemable Preference shares and Cumulative Convertible Preference Share (CCPS), Partly Paid-up Equity Shares, Rights & Warrants)	<p>Traded Securities will be valued at the last quoted closing price on the selected Stock Exchange. Where security is not traded on the selected stock exchange on a particular valuation date, the last quoted closing price on another Stock Exchange may be used. If 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 thirty days prior to valuation date.</p> <p>In case preference shares and CCPS are not traded for more than 30 days, the same shall be valued in good faith by AMC and appropriate illiquidity discount will be applied.</p> <p>The selected Stock exchange would be the National Stock Exchange of India Limited (NSE). If a security is not traded on NSE, the price on Bombay Stock Exchange (BSE) would be considered.</p> <p>Reasons for change of the stock exchange selected for valuation of security will be recorded in writing by AMC.</p>
2	Non-traded / Thinly traded Equity and Equity Related Securities (Including Redeemable Preference shares and Cumulative Convertible Preference Share (CCPS), Partly Paid-up Equity Shares & Warrants)	<p>A security will be treated as non-traded if it is not traded on any selected stock exchange for a period of thirty days prior to the valuation date.</p> <p>Thinly traded equity/equity related security is defined as, 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. In order to determine whether a security is thinly traded or not, the volumes traded in all recognized stock exchange in India may be taken into account. (SEBI Circular Ref. No. MFD/CIR/14 /088 / 2001 dated March 28, 2001)</p> <p>Non-traded/ Thinly traded securities shall be valued in</p>

		<p>‘good faith’ on the basis of appropriate valuation based on principles of fair valuation.</p> <p>As per SEBI Circular MFD/CIR/ 8 / 92 / 2000 dated September 18, 2000 non-traded / thinly traded equity is to be valued as follows:</p> <ol style="list-style-type: none"> a) Based on the latest available Balance Sheet, net worth shall be calculated as follows: b) Net Worth per share = [share capital + reserves (excluding revaluation reserves) – Misc. expenditure and Debit Balance in P&L A/c] Divided by No. of Paid up Shares. c) Average capitalization rate (P/E ratio) for the industry based upon either BSE or NSE data (which should be followed consistently and changes, if any 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 (EPS) 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 and further discounted by 10% for illiquidity so as to arrive at the fair value per share. 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 such an individual security accounts for more than 5% of the total assets of the scheme, an independent valuer shall be appointed by Board of Trustee 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. <p>Further, partly paid-up equity shares shall be valued at Underlying Equity price as reduced by the balance call money payable. Suitable illiquidity discount, if deemed necessary, may be applied with approval from valuation committee.</p> <p>Valuation of Thinly Traded / Non – traded</p>
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		<p><u>Warrants:</u></p> <p>i. Warrants are the entitlements to subscribe for the shares at a predetermined price at a later date in future.</p> <p>ii. In respect of warrants to subscribe for shares attached to instruments, the warrants will be valued at the value of the share which would be obtained on exercise of the warrant as reduced by the amount which would be payable on exercise of the warrant. Accordingly warrants will be valued using following formula:</p> <p style="padding-left: 40px;">Value of Warrant = [Value of underlying shares - exercise price]</p> <p>iii. An appropriate illiquidity discount will be applied to account for the period which must elapse before the warrant can be exercised.</p> <p>iv. If the amount payable on exercise of the warrants is higher than the value of the share, the value of the warrants should be taken as zero.</p> <p><u>Non - traded Preference Shares:</u></p> <p>Non-traded preference shares shall be valued in good faith depending upon the type of the preference share and after considering illiquidity discount, if any.</p>
3	Unlisted shares / preference shares/ warrants (excluding instruments issued by listed Companies and due for listing and primary market issue)	Not applicable since investments allowed only in listed or to be listed equity and equity related instruments.
4	Right entitlements	<p>i. Right entitlements both fully paid and partly paid will be valued as follows:</p> <p style="padding-left: 40px;">$V_r = n/m \times (P_{ex} - P_{of})$</p> <p style="padding-left: 40px;">Where</p> <p style="padding-left: 40px;">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</p> <p>ii. In case the Rights Offer Price is greater than the</p>

		<p>ex-rights price, the value of the rights share is to be taken as zero.</p> <p>iii. If the rights are derived out of non-traded shares or unlisted shares then the rights would be valued at zero market price.</p> <p>If the rights are traded on stock exchange, then the valuation guidelines for listed securities shall be applicable.</p> <p>Further suitable illiquidity discount will be applied on Right entitlement from Ex-date till the date of listing/traded price is available.</p> <p>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.</p>
5	Derivatives: Equity / Index Options & Equity / Index Futures	The Exchanges give daily settlement prices in respect of all derivatives positions. These settlements prices shall be used for the purpose of valuation of derivatives i.e. futures and options.
6	ADR / GDR / Offshore Securities	<ul style="list-style-type: none"> • If the security is listed in a time zone ahead of ours then the same day price as provided by Reuters would be used for valuation. • If the security is listed in a time zone behind ours then the previous day's price as provided by Reuters would be used for valuation. • In case the security is not traded on the above mentioned days, price of previous day should be used provided the price is not prior than 30 days. • In case the security is not traded for more than 30 days, the same shall be valued in good faith by AMC and appropriate illiquidity discount will be applied.
7	Application Money for Primary Market Issue:	Application money for primary market issue should be valued at cost up to 30 days from the closure of the issue and / or allotment. If the security is not allotted within 30 days from the closure of the issue or listed within 30 days from the date of allotment, application money is to be valued as per the directives of valuation committee.
8	Equity shares invested as an Anchor Investor:	At the discretion of the AMC and with the approval of the valuation committee, post listing, equity shares invested on Anchor basis may be valued at a price lower

		than the listed market price available on NSE/BSE by applying a suitable illiquidity discount (If such shares are in lock-in period).
9	Shares on De-merger / Merger and Other Corporate Action Events	<p>Demerger</p> <ol style="list-style-type: none"> 1. In case one entity is demerged into 2 or more entities and the shares of all the resulting entities as well as the demerged entity are traded immediately on de-merger, then the last quoted closing price on the stock exchange will be considered for valuation, provided such closing price is not more than 30 days old prior to valuation date. 2. In case of demerger where the shares of the demerged entity continue to be listed and shares of resulting entity are unlisted, then the value of shares of resulting entity will be calculated as follows: <p style="margin-left: 40px;">Closing price of shares of demerged entity on immediately preceding trading day before demerger (i.e. cum demerger price) minus Closing price of shares of demerged entity on the trading day immediately after demerger (i.e. ex-demerger price)</p> <p>In case the value derived using above formula is zero or negative then the shares of resulting entity will be valued at zero.</p> <p>In case there are two or more unlisted entities resulting due to a demerger, then the market value of shares of unlisted entity arrived as above will be allocated to the resulting entities in the ratio of cost of shares 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.</p> <p>If a company provides any method / ratio for cost allocation as a part of scheme of arrangement, the same will be considered.</p> 3. In case of demerger where shares of all the entities (i.e. demerged entity as well as resulting entities) are unlisted, then the last quoted closing price of demerged entity on the trading day immediately preceding the demerger (i.e. cum demerger price) will be considered for valuation of shares of all the entities for a period of 30 days from the date of demerger and such value will be allocated over

		<p>demerged entity and resulting entities in the ratio of cost of shares.</p> <p>If a company provides any method / ratio for cost allocation as a part of scheme of arrangement, the same will be adopted.</p> <p>In case there are no details available for the company, the same will be valued at fair value as determined by the valuation committee.</p> <p>Merger Where company 'X' is merged with company 'Y' and company 'Y' continues to be listed post the merger, then the shares of company 'Y' allotted against shares of company 'X' (based on merger ratio) will be valued at the last quoted closing price of company 'Y' on the stock exchange. The aggregate cost of shares of company 'X' will be added to the aggregate cost of shares of company 'Y'.</p> <p>In case where company 'X' and company 'Y' which are listed are merged to form company 'Z' and company 'Z' is unlisted, then the value of shares of company 'Z' will be aggregate of last quoted closing price of shares of company 'X' and shares of company 'Y' on immediate preceding trading day (i.e. cum-merger date) adjusted for merger ratio.</p> <p>The aggregate cost of company 'X' and company 'Y' shares will be added to derive the cost of company 'Z' shares.</p> <p>Further while valuing shares pursuant to corporate action like merger / demerger, appropriate illiquidity discount may be provided with the approval of Valuation Committee.</p> <p>In case of any other corporate action, the AMC shall value the security at fair value in good faith on a case to case basis and approval from valuation committee will be sought for the valuation</p>
10	Suspended Security	<p>In case trading in an equity security is suspended upto 30 days, then the last traded price would be considered for valuation of that security.</p> <p>If an equity security remains suspended for trading on the stock exchange for more than 30 days, then it would be valued as non-traded security.</p>

B. Fixed Income and related securities

Security level prices provided by Valuation Agencies will be used for Valuation of Money Market and Debt Securities. For arriving at security level pricing, waterfall approach to be followed by Valuation agencies is annexed as Annexure II to the policy. Currently, AMFI has designated CRISIL Limited ('CRISIL') and ICRA Online Limited ('ICRA') as "Valuation Agencies".

The detailed guidelines for Valuation of Money Market and Debt Securities are as follows:

i. Valuation of Money Market and Debt Securities rated above investment grade

1	<p>For securities with residual maturity > 30 days (excluding, Government Securities/ State Government Securities (SDL)/ T Bills/ Cash Management Bills)</p>	<p>Money market and Debt securities* will be valued at average of the security level prices provided by Valuation Agencies.</p> <p>If security level price for new security purchased (primary allotment or secondary market) is not available from Valuation Agencies, the valuation of such securities shall be done at the weighted average yield of all the purchases made by Invesco Mutual Fund on the day of allotment /purchase.</p> <p>In case the Put/Call option is exercised, the prices received from the Valuation Agencies (if available) till put/ call date shall be considered during the notice period of the security. In the absence of the same, the price will be amortized from the price prevailing on the date of communication of the exercise of the put or call provided the notice period (period from exercise of put or call option and put or call date) is equal to or less than 30 days. The notice period will begin from the date of communication of the exercise of the option (notice date) till the put or call date.</p>
2	<p>For securities having residual maturity <= 30 days (excluding Government Securities/ State Government Securities (SDL)/ T Bills/ Cash Management Bills, Interest rate Swaps)</p>	<p>Money market and Debt Securities * will be amortized on straight line basis to maturity from cost or last valuation price, whichever is more recent.</p> <p>The amortized price can be used for valuation as long as their valuation remains within $\pm 0.025\%$ band of the reference price. The reference price shall be the average of security level price as provided by Valuation Agencies. If the reference price is not available then amortized price (based on the cost or the last valuation price) shall be considered. In case the variance falls outside the above band, the valuation shall be adjusted in order to bring it within $\pm 0.025\%$ band.</p> <p>If security level price for new security purchased (primary allotment or secondary market) is not available from Valuation Agencies, then such security shall be valued on amortization basis on the date of allotment / purchase.</p>

		<p>Whenever a security moves from 31 days residual maturity to 30 days residual maturity, the price as on 31st day would be used for amortization from 30th day.</p> <p>With effect from June 30, 2020, amortization-based valuation shall be dispensed with and irrespective of residual maturity, all money market and debt securities shall be valued in a manner similar to the process followed for valuation of securities with residual maturity > 30 days.</p>
3	Government Securities	<p>Government Securities shall mean and include such securities issued by Central government or State Government, Cash Management bills, Treasury bills, State Development Loans etc.</p> <p>Government Securities shall be valued at the average of security level prices provided by Valuation Agencies.</p>
<p>* Money market and Debt securities would also include</p> <ul style="list-style-type: none"> • Bills purchased under rediscounting scheme (Bill rediscounting/ BRDS) • Floating rate securities 		
4	Valuation of securities with put/call options	<p>The option embedded securities would be valued as follows:</p> <p>Securities with call option: The securities with call option shall be valued at the lower of the value as obtained by valuing the security to final maturity and valuing the security to call option.</p> <p>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.</p> <p>Securities with Put option: The securities with put option shall be valued at the higher of the value as obtained by valuing the security to final maturity and valuing the security to put option</p> <p>In case there are multiple put options, the highest value obtained by valuing to the various put dates and valuing to the maturity date is to be taken as the value of the instruments.</p> <p>Securities with both Put and Call option: The securities with both Put and Call option on the same day and having the same Put and Call Option price shall be deemed to mature on the Put/Call day and valued accordingly.</p>

		<p>In all other cases, the cash flow of each put / call option shall be evaluated and the security shall be valued on the following basis:</p> <ul style="list-style-type: none"> • Identify a ‘Put Trigger Date’, a date on which ‘price to put option’ is the highest when compared with price to other put options and maturity price. • Identify a ‘Call Trigger Date’, a date on which ‘price to call option’ is the lowest when compared with price to other call options and maturity price. • In case no Put Trigger Date or Call Trigger Date (‘Trigger Date’) is available, then valuation would be done to maturity price. In case one Trigger Date is available, then valuation would be done as to the said Trigger Date. In case both Trigger Dates are available, then valuation would be done to the earliest date. <p>If a put option is not exercised by a Mutual Fund when exercising such put option would have been in favour of the scheme, in such cases the justification for not exercising the put option shall be provided to the Board of AMC and Trustees</p>
5	Interest Rate Swap (IRS)	<p>Interest Rate Swap (IRS) / OTC derivatives</p> <p>Prices for all OTC derivatives shall be valued at the average of Valuation prices provided for individual securities by Valuation Agencies. (SEBI Circular No. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated September 24, 2019).</p> <p>The below process shall be continued to value the Interest Rate Swap (IRS) / OTC derivatives until such time these prices are provided by the Valuation Agencies.</p> <p>In case of IRS contracts, counter parties agree to exchange stream of interest payments on notional value at an agreed date. One party agrees to pay floating and another agrees to pay fixed rate of interest. Floating rate is decided on the basis of a benchmark such as ‘Financial Benchmarks India Pvt. Ltd. (FBIL)’ MIBOR/3 Day MIBOR.</p> <p>Valuation of IRS involves valuation of streams of interest payments. The underlying security is valued in the same manner as was valued before entering into IRS contract.</p> <p>Value of IRS contract is the present value of the difference between the fixed and floating interest to be received/paid</p>

		<p>on maturity of the contract. Floating rate interest till maturity is the interest accrued till the valuation date plus the interest on remaining period at reversal rate.</p> <p>Reversal rate for the day is available on Reuters /Bloomberg for different maturities. The relevant rate is taken on the basis of maturity of the contract. However, if the maturity date falls between the two years, the reversal rate is arrived by interpolation on valuation date.</p>
6	Interest Rate Futures	The Exchanges give daily settlement prices in respect of all derivatives positions. These settlement prices shall be used for the purpose of valuation.
7	Bank Fixed Deposits and Repurchase (repo) transactions	Repurchase (repo) transactions including tri-party repo i.e. TREPS, Clearcorp Repo Order Matching System i.e. CROMS and Repo in Corporate Debt Securities with tenor of up to 30 days and investment in short-term deposits with banks (pending deployment) shall be valued on cost plus accrual basis.

ii. Valuation of Money Market and Debt Securities rated below investment grade

A money market or debt security shall be classified as “below investment grade” if the long term rating of the security assigned by a SEBI registered Credit Rating Agency (CRA) is below BBB- or if the short term rating of the security is below A3.

A money market or debt security shall be classified as “Default” if the interest and / or principal amount has not been received, on the day such amount was due or when such security has been downgraded to “Default” grade by a CRA. In this respect, Invesco Mutual Fund shall promptly inform the Valuation Agencies and the CRAs, any instance of non-receipt of payment of interest and / or principal amount (part or full) in any security

In case of instruments with dual rating the same would be considered below investment grade if any of the rating agencies rating that instrument downgrades it to sub investment grade.

All such money market and debt securities rated below investment grade shall be valued at the average of the security level prices provided by Valuation Agencies.

Till such time the Valuation Agencies compute the valuation of securities classified as below investment grade, such securities shall be valued on the basis of indicative haircuts provided by Valuation 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. These haircuts shall be updated and refined as and when there is availability of material information which impacts the haircuts.

In case of trades during the interim period between date of credit event and receipt of valuation price from Valuation Agencies, the AMC shall consider such traded price for valuation if it is lower than the

price post standard haircut. The said traded price shall be considered for valuation till the valuation price is determined by the Valuation Agencies.

In case of trades after the valuation price is computed by the Valuation Agencies as referred above and where the traded price is lower than such computed price, such traded price shall be considered for the purpose of valuation and the valuation price may be revised accordingly.

The indicative haircut communicated by AMFI vide its communication dated April 30, 2019 is as follows:

1. Haircuts for senior, secured securities **

Rating / Sector	Infrastructure, Real Estate, Hotels, Loan against shares and Hospitals	Other Manufacturing and Financial Institutions	Trading, Gems & Jewellery and Others
BB	15%	20%	25%
B	25%	40%	50%
C	35%	55%	70%
D	50%	75%	100%

2. Haircuts on subordinated and unsecured (or both) securities **

Rating / Sector	Infrastructure, Real Estate, Hotels, Loan against shares and Hospitals	Other Manufacturing and Financial Institutions	Trading, Gems & Jewellery and Others
BB	25%	25%	25%
B	50%	50%	50%
C	70%	70%	70%
D	100%	100%	100%

The indicative haircuts mentioned in table above are currently recommended by Valuation Agencies and shall be subject to change from time to time based on the indicative haircuts provided by agencies.

iii. Treatment of accrued interest, future interest accrual and future recovery in case of money market and debt securities classified as below investment grade or default:

The indicative haircut that has been applied to the principal should be applied to any accrued interest.

In case of securities classified as below investment grade but not default, interest accrual may continue with the same haircut applied to the principal. In case of securities classified as default, no further interest accrual shall be made.

iv. Treatment of any future recovery

Any recovery shall first be adjusted against the outstanding interest recognized in the NAV and any balance shall be adjusted against the value of principal recognized in the NAV.

Any recovery in excess of the carried value (i.e. the value recognized in NAV) should then be applied first towards amount of interest written off and then towards amount of principal written off.

v. Inter-Scheme Transfer (IST)

Inter-scheme Transfer (IST)

- IST of any money market or debt security (irrespective of maturity) will be done using the prices sourced from the Valuation Agencies.
- If prices from the Valuation Agencies are received within the pre-agreed turn-around-time (TAT) an average of the prices so received shall be used for IST pricing. The TAT is currently 30 minutes for CP, CD, T-Bills and 45 minutes for G-Sec, SDL, corporate bonds and may be amended from time to time by AMFI.
- If price from only one valuation agency is received within the agreed TAT, then that price will be used for IST pricing
- If prices are not received from any of the Valuation Agencies within the agreed TAT, the IST would be at the price derived from the weighted average yield / price of traded securities at the time of the IST for which the below mentioned process will be followed

a) For instruments maturing above 1 year:

The weighted average yield / price of traded securities (excluding inter scheme transfers of others and own trades of Invesco Mutual Fund) will be considered if there are at least two trades, with each trade being of a minimum Rs 5 crores face value, aggregating to Rs. 25 crores or more for same or similar security on a public platform*

b) For instruments maturing below 1 year:

The weighted average yield / price of traded securities (excluding inter scheme transfers of others and own trades of Invesco Mutual Fund) will be taken if there are at least three trades, with each trade being of a minimum Rs. 25 crores face value, aggregating to Rs. 100 crores or more for same or similar security on a public platform*

Criteria for identifying similar securities in case of securities having residual maturing above 30 days:

Similar security should be identified by the following waterfall logic, provided that the maturity date of the security is within the same calendar quarter:

- i. Same issuer and same type of asset, with maturity date within ± 15 working days of maturity date of security shall be considered first. If no such instance is available, then Step ii. will be followed:

Example: For Punjab National Bank CD maturing on March 6, 2019, all secondary market trades of Punjab National Bank CDs maturing within February 12, 2019 to March 28, 2019 will be considered first.

- ii. Similar security from a different issuer within the same category (PSU Bank, Private Bank or Financial Institution etc.) and similar long term credit rating**, with maturity date within ± 15 working days of maturity date of security will be considered.

Example: For Punjab National Bank CD maturing on March 6, 2019, all secondary market

trades of similar public sector bank CDs maturing within February 12, 2019 to March 28, 2019 will be considered.

****In case of banks CDs -**

- Issuer of the Securities having long term rating of AAA and/or AA+ and short term rating of A1+ will be considered as comparable.
- Issuer of the Securities having long term rating of AA and/or AA- and short term rating of A1+ will be considered as comparable.
- Issuer of the Securities having long term rating of A+ and below and short term rating of A1+ will be considered as comparable.

Criteria for identifying similar securities in case of securities having residual maturing below 31 days:

Similar security should be identified by the following waterfall logic, provided that the maturity date of the security is within the same calendar quarter and should have a residual maturity upto 30 days:

- i. Same issuer and same type of asset, with maturity date within ± 7 calendar days of maturity date of security shall be considered first and should have a residual maturity upto 30 days. If no such instance is available, then Step ii. will be followed.

Example: For Punjab National Bank CD maturing on March 6, 2019, all secondary market trades of Punjab National Bank CDs maturing within February 27, 2019 to March 13, 2019 will be considered first.

- ii. Similar security from a different issuer within the same category (PSU Bank, Private Bank or Financial Institution etc.) and similar long term credit rating**, with maturity date within ± 7 calendar days of maturity date of security will be considered and should have a residual maturity upto 30 days.

Example: For Punjab National Bank CD maturing on March 6, 2019, all secondary market trades of similar public sector bank CDs maturing within February 27, 2019 to March 13, 2019 will be considered first.

**** In case of banks CDs -**

- Issuer of the Securities having long term rating of AAA and/or AA+ and short term rating of A1+ will be considered as comparable.
- Issuer of the Securities having long term rating of AA and/or AA- and short term rating of A1+ will be considered as comparable.
- Issuer of the Securities having long term rating of A+ and below and short-term rating of A1+ will be considered as comparable.

For the purpose of determining similar security, the data available on 'Bloomberg' will be used as the source for credit ratings.

Further, the classification of the issuers for similar securities will be into three sectors viz. Banking, Manufacturing and Non-Banking Finance Companies (NBFC). Bank CDs will be

compared against bank CDs (within bank CDs, PSU Bank CDs will be compared to PSU Bank CDs and Private / Foreign bank CDs will be compared to Private / Foreign bank CDs), Manufacturing papers will be compared against manufacturing papers and NBFC will be compared against NBFC.

Further, for the purpose of identification of similar securities, in case of security embedded with 'Put and Call' option, only those securities with 'Put and Call' option on the same day and the same 'Put and Call' option price shall be deemed to mature on such Put / call date. . All other securities with a "Put and a Call" option not meeting these criteria would have the final maturity date of the security considered for the purpose of identification of similar securities

Note:

Outlier trades, if any, will be ignored after recording suitable justification.

If due to the non-availability of traded securities, at the time of the IST, the above mentioned criteria cannot be fulfilled, the IST would be done at the previous day's price/yield.

Notes:

1. *Public Platform refers to:

F-TRAC / Corporate Bond Reporting Platform (CBRICS) / Indian Corporate Debt Market (ICDM) / Negotiated Dealing System - Order Management (NDS-OM) / MSE FIRST: For corporate bonds / debentures, commercial papers, certificate of deposits and securitized debt. (Applicable only for pricing of IST and not for valuation)

Order of preference of public platforms for Bonds will be as follows:

- CBRICS
- ICDM
- MSE FIRST

2. Weighted average yield shall be rounded up to two digits after decimal point.

Deviations where the prices given by Valuation Agencies are not considered for valuation –

In case AMC decides to deviate from the valuation prices or indicative haircut given by the Valuation Agencies, the detailed rationale for each instance of deviation 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 as per the Valuation Agencies 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 mentioned above shall be disclosed immediately and prominently, under a separate head on website of AMC. Further, while disclosing the total number of instances of deviation in the monthly and half-yearly portfolio statements, AMC shall also provide the exact link to the website for accessing the information mentioned above.

C. Other securities:

1	Convertible Debentures	The non-convertible and convertible components of convertible debentures and bonds shall be valued separately. The non-convertible component would be valued on the same basis as would be applicable to a debt instrument. The convertible component shall 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 later instrument can be adopted after an appropriate discount for the non-tradability of the instrument during the period preceding conversion. While valuing such instruments, the fact whether the conversion is optional will also be factored in.
2	Valuation of Mutual Fund Unit (MFU)/ Valuation of Exchange Traded Fund (ETF)	<p>As per the guidelines issued by AMFI vide letter no 1 / Valuation / 16/10-11 dated December 28, 2010 for valuation of mutual fund units:</p> <p>Listed: MFU and ETF listed and Traded would be valued at the closing price on the stock exchange as on the valuation date.</p> <p>In case on the valuation date if traded price is not available for listed MFU / ETF, then such MFU / ETF would be valued at applicable NAV of the respective scheme as on the valuation date.</p> <p>Unlisted: Unlisted MFU would be valued at the NAV as on the valuation date.</p>
3	Gold	<p>Since physical gold and other permitted instruments linked to gold are denominated in gold tonnage, it will be valued based on the market price of gold in the domestic market and will be marked to market on a daily basis. The market price of gold in the domestic market on any business day would be arrived at as under:</p> <p>Domestic price of gold = (London Bullion Market Association AM fixing in US\$ / ounce X conversion factor for converting</p>

		<p>ounce into kg for 0.995 fineness X rate for US\$ into INR) + custom duty for import of gold and other taxes/levies and charges, as applicable + notional premium & fixing that may be charged for delivery of gold to the place where it is stored on behalf of mutual fund.</p> <p>On any day, the LBMA AM fixing or reference rate issued by Financial Benchmarks India Ltd (FBIL) is not available due to a holiday, then the previous day price is applied for the purpose of calculating the value of gold.</p>
4	Valuation of Units of Overseas Mutual Fund:	Units of Overseas Mutual Fund will be valued at last published Net Asset Value (“NAV”) of underlying Overseas Mutual Fund security.
5	Security Lending & Borrowing (SLB)	Security Lending & Borrowing (SLB) will be valued on the basis of amortization.

D. Conversion of prices in foreign currency to Indian Rupees (‘INR’):

The prices of securities which are denominated in foreign currencies (i.e. ADR/GDR/Offshore securities/units of overseas mutual funds) need to be converted into INR. For conversion, the Bid Rate of foreign currency INR exchange rate available on Reuters at 5.00 p.m. IST would be used.

In case, the Reuters exchange rate is not available, then the following sources will be used for exchange rate in the order of priority:

- Exchange rate (Bid Rate) available on Bloomberg at 5.00 p.m. IST;
- Reference rate issued by Financial Benchmarks India Ltd (FBIL) as at the close of banking hours on the relevant business day in India;
- Any other publicly available source.

If the Exchange rate is not available in any of the above source then previous day exchange rate would be used.

ANNEXURE II - WATERFALL MECHANISM

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

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

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.

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)

As required under Para 1.1.1.1(a) of SEBI vide circular no. SEBI/HO/IMD/DF4/CIR/P/2019/102 dated September 24, 2019, marketable lot is defined as under:

The following volume criteria shall be used for recognition of trades by Valuation Agencies:

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.

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 matrix

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

Steps	Detailed Process
Step 1	<p>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:</p> <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	<p>Representative issuers - For the aforesaid 4 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</p>

	<p>sector.</p> <p>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.</p>
Step 3	<p>Calculation of benchmark curve and calculation of spread -</p> <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 representative issuer is available, polling shall be conducted from market participants 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. 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
Step 4	<ol style="list-style-type: none"> 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. 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. 3. Residual tenure of the securities of representative issuers shall be used for construction of yield curve.

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.