



Security Level Valuations (SLV)

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Research

CRISIL SLV – Valuation Approach

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•Waterfall mechanism for valuation of money market and debt instruments

Unique waterfall approach to arrive at yield of each security

1. Volume Weighted Average Yield (VWAY) of the primary reissuance of the same ISIN and secondary trades in same ISIN
2. VWAY of primary issuances through book building of same issuer and similar maturity.
3. VWAY of secondary market trades of same issuer and similar maturity.
4. VWAY of primary issuances through fixed price auction of same issuer and similar maturity
5. VWAY of primary issuances through book building of similar issuer and similar maturity.
6. VWAY of secondary market trades of similar issuer and similar maturity.
7. VWAY of primary issuances through fixed price auction of similar issuer and similar maturity
8. Continuation of previous spread over the benchmark matrix (polling may also be carried out for construction of matrix)
9. Polling for security in case of any event or special circumstances.

Note: VWAY of entire day is used. In exceptional situation day, VWAY of trades after the event shall be used.

Note: Outliers trades are identified and reviewed at each step

•Similar maturity and similar issuer criteria

Residual Tenure of security 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 1yr	Calendar Monthly Bucket
Greater than 1yr to 3yr	Calendar Quarterly Bucket
Greater than 3 years	Calendar Half Yearly or Greater Bucket

- Above buckets can be modified with appropriate rationale and documentation
- Traded spreads may be used for longer maturity buckets for semi liquid and illiquid securities.

Criteria to identify similar issuers: Issuers within same sector/industry and/or

1. Issuers within same rating band and/or
2. Issuers with same parent/ within same group and/or
3. Issuers with debt securities having same guarantors and/or
4. Issuers with securities having similar terms like Loan Against Shares (LAS)/Loan Against Property (LAP)
5. Issuers with similar characteristics like AT1 bonds of banks, perpetual securities of corporates, sub segment within a broader segment of NBFCs etc

- Similar issuers are issuers which trade at same yields or whose spreads move in tandem.
- Above criteria is broad principles and not all issuers may get classified as similar issuer.
- In some cases, similar issuer trades may not be used in valuations, but also can be used to review the spreads of other issuers.

•Recognition of trades and outlier criteria

- Critical to identify and disregard outlier trade for purpose of valuation.
- Potential outlier trades are classified basis the liquidity classification of issuer and relative yield movement of trade as compared to yield movement of benchmark.
- Outliers identified are validated through polling for considering into valuations.

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

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• Trades criteria

Parameter	Minimum volume Criteria for recognition of trades in valuations
Primary	INR 25 cr for both Bonds/NCD/CPCD and other money market securities.
Secondary	INR 5 Cr for bonds/NCD/SLR
Secondary	INR 25 Cr for CPCD, T-Bills and other money market instruments

Product category	Primary/Secondary trades	Calculation (Same ISIN)
Corporate Bonds/ CPCD	Secondary	VWAY of entire day of eligible trades* (T+0, T+1), reported on NSE, BSE and VWAY of reissuance of same ISIN.
SLR	Secondary	VWAY of last 1 hour, if no trades available, then VWAY of entire day (T+1, T+2) reported on NDS OM, NDS in lot size and odd lot markets.

- *In corporate bonds all trades reported on BSE/NSE WDM platform (excl. IST, outlier trades and/or trade of size less than 5 cr, trades with yield as “0”) are referred as eligible trades.

•Matrix/ benchmark construction

Step	Detailed process
Step 1: Segmentation of corporates & Step 2: Selection of representative issuers	Issuers are first categorised across 4 sectors. Representative benchmark issuers are then chosen basis the liquidity and availability of securities across tenors. <ol style="list-style-type: none"> 1. PSU/FI/Banks 2. NBFCs 3. HFCs 4. Other corporates
Step 3: Calculation of benchmark curve and calculation of spread	<ol style="list-style-type: none"> 1. Yield curve to be calculated for maturities ranging from 1 month till 20 years and above. 2. Waterfall approach as defined previously 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. All other issuers will be pegged to the respective benchmark issuers and spread over the benchmark curve for each security is computed. 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: Miscellaneous	<ol style="list-style-type: none"> 1. Principles of VWAY, outlier trades, exceptional events are applicable for construction of benchmark. 2. Benchmark issuer may be replaced in case of changes in rating, liquidity or any other material event

•SLR valuations: waterfall approach

Waterfall Approach

1. VWAY of last one hour, subject to outlier validation
2. VWAY yield of primary issuance
3. VWAY for the day, subject to outlier validation
4. A two way quote not wider than 5 bps on NDS OM, subject to outlier validation.
5. Carry forward of spreads over the benchmark
6. Polling etc.

Note: +/- 5 bps Deviation in yield of traded security over and above the yield of the benchmark movement is classified as an outlier. Such trades shall be included in valuations post validation through polls

•Policy for Exceptions

- Exceptional days may include:
 - Monetary Policies
 - Annual Budget
 - Quarter end days
 - Policy announcements
 - Macro Economic data release days
- Valuation approach may see following deviations:
 - Priority to market polls over trades
 - Review of spreads basis any material news regarding issuer/sector
 - Regulatory changes impacting market levels.
 - And any other necessary steps based on committee's discussion