

G-Sec valuation

Methodology

Background

CRISIL Funds and Fixed Income Research provides valuation for all G-Sec securities to subscribers on a daily basis. These prices are used by various market participants such as AMCs, Insurance companies, Corporates and others to value their portfolio. Government securities (G-secs) are debt papers issued by Government of India in lieu of their borrowing from the market bearing a fixed coupon or otherwise payable semi-annually or otherwise and principal as per schedule normally on due date of redemption. It acknowledges the Governments debt obligation. G-secs carry practically no risk of debt and hence are called risk free gilt-edged instruments.

Waterfall approach

Step 1: Same ISIN secondary trade VWAY of last 1 hour subject to outlier validation

- VWAY of Trades reported on RBI Negotiated Dealing System – Order Matching segment (NDS – OM) & RBI Negotiated Dealing System (NDS) for last one hour are considered for same ISIN
- Trades reported on NDS OM & NDS with minimum of one trade of volume 5 crore and above including odd lot and market lot are considered.
- If trade is outside our threshold, we will poll from market participants for fair level for valuation for that particular ISIN

Step 2: Same ISIN secondary market trade VWAY for the day subject to outlier validation

- In absence of same ISIN trade in the last one hour, VWAY of Trades reported on RBI Negotiated Dealing System – Order Matching segment (NDS – OM) & RBI Negotiated Dealing System (NDS) for full day are considered for valuation
- Trades reported on NDS OM & NDS with minimum of one trade of volume 5 crore and above including odd lot and market lot are considered.
- If trade is outside our threshold, we will poll from market participants for fair level for valuation for that particular ISIN

Step 3: VWAY of primary issuances (auction yield)

- In case of no secondary market trade for reissuance/new auction papers, VWAY of Primary trade (Newly auctioned paper/ Re-issuance) will be considered for valuation
- (Every Friday G-sec is re-issued or newly issued)
- If trade is outside our threshold, we will poll from market participants for fair level for valuation for that particular ISIN

Step 4: Two-way quotes reported on NDS OM, subject to outlier validation

- Two-way quotes not wider than 5 bps considered for valuations and satisfies the volume criteria mentioned earlier (minimum bid and ask quantity of 5 crore and above). Mid-point of two-way quote is considered for valuation.
- If mid-point of two-way quote is outside the threshold we will poll from market participants for fair level for valuation for that particular ISIN

Step 5: Benchmark securities movement

- If non- benchmark securities which are not traded in the market and for which no quotes are available, movement of the respective benchmark security is given to all the securities in respective tenor

Step 6: Polling

Market participants are polled in case:

- No trade or two-way quote is available for the benchmark securities
- Trade is identified as outlier
- Client identified polling/ Review polling

Polls are also taken into consideration on exceptional days including:

- Monetary Policies
- Annual Budget
- Quarter end days
- Policy announcements
- Macro-Economic data release days

Market participants feedback is captured in polling tool on daily basis. For more information on polling, refer to the polling process document.

Trades that qualify as per volume criteria

- Trades reported on NDS OM & NDS with minimum of one trade of volume 5 crore and above including odd lot and market lot qualify for daily G-sec valuations and
- Two-way quotes not wider than 5 bps considered for valuations and satisfies the volume criteria mentioned earlier (minimum bid and ask quantity of 5 crore and above) are considered. Mid-point of two-way quote is considered for valuation.

Special papers:

G-Sec FRB valuation approach: The approach followed for G-Sec FRB is similar to the approach used for valuation of floating rate corporate bonds linked to T-bills.

- Cash flow shall be plotted till maturity using forward rates computed by CRISIL derived from the G-sec ZCYC curve (Interpolation will be used here to arrive at forwards rates for coupon calculation since only the next immediate coupon is shared by RBI via press release)

- Discounting shall be done using YTM (Yield of corresponding maturity benchmark G-Sec plus spread).
- Trades would be considered based on the standard prescribed waterfall mechanism for SLR securities, trade outlier is identified if security is moved by more than 50 paise over previous day.

G-sec Repo-For valuation of G-sec Repo security, a spread is maintained over T-bill level for the given maturity. This spread is decided as per the initial traded level of the Repo over the T-bill for the same/similar maturity and as per trades on the platform. Trades are checked for Repo on CROMS platform of CCIL and in-threshold trades are taken for valuation and outliers are polled from market participants. Spreads are aligned based on trades or market feedback via polling and is maintained till the next trade takes place.

Special securities- Government of India also issues, from time to time, green bonds, special securities to entities like Oil Marketing Companies, Fertilizer Companies, the Food Corporation of India, etc. (popularly called oil bonds, fertilizer bonds and food bonds respectively) as compensation to these companies in lieu of cash subsidies. Trades would be considered based on the standard prescribed waterfall mechanism for G-sec securities but these securities are valued at a spread over the other dated securities of comparable maturity. Spreads are based on trades and market feedback and are reviewed on regular intervals.

Benchmark Identification

Criteria: Most liquid security in the stated bucket will be chosen as benchmark security. Liquid security would be identified based on total traded quantum (secondary trades) and no. of days traded and the security scoring maximum in both criteria will be benchmark paper in that given bucket.

Tenor points (Buckets) identification- Yearly up to 15 years post that 20 year, 25 year, 30 year, 40 year and longest point on the yield curve.

Quality check

- Review of valuations is done by secondary analyst. All changes over the previous day are reviewed.

Action taken in case of outlier trades

- Outlier definition +/- 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.
- Outlier is checked on VWAY considering all transactions.

Governance mechanism

CRISIL has an internal committee comprising of President, Senior Director/s, Director/s and Associate Director/s which has following role as provided below.

- **Criteria committee:** Valuation policy and any changes to such policies are discussed with the committee and are incorporated post approval by the committee.
- **Valuation committee:** Matters pertaining to exceptions are discussed with valuation committee and acted upon based on its feedback. Exceptions may include any methodology changes, regulatory changes, market events impacting yields, etc.

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