

# FINANCIAL BENCHMARKS INDIA PVT LTD.

November 15, 2020

## Revised G-sec methodology- Feedback from market participants:

The Draft G-sec methodology document was placed on the website of FBIL seeking comments from various stakeholders. It was followed up with a webinar with market participants on October 5, 2020. The queries and suggestions received have been analysed and the response of FBIL is given below.

SN	Queries and Suggestions	Response
1.	<p>a) The overnight tenure pillar of G-Sec curve has been mentioned as 7-day T-Bill. We feel that MROR (overnight market repo rate) may be considered instead of the 7-day T-Bill rate as it would be a better representative.</p> <p>b) The valuation of traded and non-traded G-Secs may be drafted under separate sections to provide a better flow in the document.</p> <p>c) The proposed methodology factors VWAP of traded prices of a security during the last one hour. If this is not available, the VWAP of the full day's traded prices are proposed to be considered. Kindly clarify if this would be the position also under truncated market hours prevailing currently when trading window is between 9AM to 2PM.</p>	<p>As per the proposed methodology:</p> <ol style="list-style-type: none"> <li>Both MROR and FBIL 7-day T-Bill rate were tested as the first input point (overnight tenor) and it was found that 7-day T-Bill rates provide a reasonably stable anchor compared to MROR. Accordingly, the FBIL 7-day T-bill rate was selected as the first input point.</li> <li>The document is structured in such a way that the traded data is placed under the <u>Input data section</u> (the Level 1, Level 2 and Level 3) and the non-traded ISIN valuation is followed by the <u>Adjustment Factor section</u>.</li> <li>On the days when market is extended or truncated, the last one-hour data collection window will be adjusted accordingly, as mentioned in the Methodology Document (Paragraph VI and VII INPUT).</li> </ol>
2.	<p>Page No.4:</p> <p>3.2 Valuation of G-Secs- overarching principle:</p> <p>All G-Secs in respect of which Level 1 data, or in its absence Level 2 data equal to or exceeding thresholds to be defined later in this document are available will be valued based on these data. In other words, although these traded G-Secs qualify to be included as model inputs, the estimated model prices will not be used for their valuation. For the purpose of this document, these will be termed as 'Traded ISINs'. These ISINs will be valued at their respective Volume weighted average yields (VWAY)/ YTM. The prices of G. Secs will be derived from their VWAY.</p> <p>Feedback: It is not explicitly mentioned whether final valuation price for Traded ISIN will be based on <b>VWAY of Last 1 hour or VWAY of Entire day</b> and same should be specified in the final methodology circular.</p>	<p>As indicated under the heading "<u>Inputs for Residual Maturity: 1-14 years – Level 1 data</u>" in the proposed methodology, all trades in the last one hour will be selected to calculate the volume-weighted average YTM (VWAY).</p> <p>If there are less than 3 trades in the last one hour, then the entire day's trades will be used to calculate the VWAY.</p> <p>The use of Level 1, Level 2 and Level 3 data follows a waterfall mechanism: If the threshold criteria of 3 trades and aggregate face value of ₹15 crores are met in the last 1 hour, then only the last hour data will be used. If not, then the entire day's trading data will be considered to find out if the threshold criteria, as above, are met. Otherwise, take recourse to fallback provisions for use of MOT and Proxy (Level 2 and Level 3)</p>
4.	<p>Page no 6 - Point No 1 - Quote- "ON first day of each week -----"</p> <p>It is not clear from the document in this section that we are to identify the input securities for the current week based on trades that have taken place</p>	<p>Page No. 7 - Point no. 3 for the same paragraph states as under:</p> <p>"That ISIN of each group so formed, which has the highest product of number of trades and the corresponding volume during the last 5 business days will be chosen as the</p>

	during the previous five business days. It needs to be clarified the operational part on the first business day of the week. it should be clarified that the past five business days to be taken even if the previous week has only four business /trading days .Only from flow chart showing eligibility criteria of 15 trades and 75 cr have we deduced that the previous 5 business days trade to be scrutinized to decide on input points for the current week (T0)	representative ISIN or input point of that group for the purpose of data input into the model for that week.”  The following sentence is further added to the same paragraph Page 6, point 1 to provide clarity: “The threshold criteria for the selection of ISINs to be used as input points is minimum of 15 trades and ₹75Crores.” This selection is valid for the current week. (the threshold of (₹75crores/15 trades) volume and number of trades is an aggregate over all the 5 days and maximum lookback period is 5 trading days.																																			
5.	Page no. 7 Point 4- The calculation of Proxy in this section needs to be clarified. Only from the illustration following this paragraph we come to know that proxy calculation involves preceding and succeeding securities traded on the previous day and on the trade date. Narration to be more elaborate.	The following sentence is added to the paragraph to provide clarity: “Average of the difference between current day’s VWAY and previous day’s Published YTM of the preceding and succeeding securities. In case of ISINs at the extreme maturities (like 2020 and 2060), the market movement of the next available ISIN will be used.)																																			
6.	Page No 8 - The table shows minimum requirement of securities for the last bucket (>34 yrs and above) as 1+1. There are presently four securities in last bucket. Since last point has to be compulsorily taken as an input i.e. 6.80 GS 2060 (now the last maturing paper), do we need any additional security to fill the bucket in case if no other security qualifies to be the input point or only the last point will be the only input point of the bucket? The methodology says 1+1 which means in addition to the last maturing paper we will need an additional paper.	The following changes are made to the document: “ <table><tr><th>Bucket</th><th>Residual Maturity</th><th>Current Redemption Calendar Years</th><th>Minimum ISIN Requirement</th><th>Total ISINs in Bucket<sup>1</sup></th></tr><tr><td>1</td><td>&gt;14 to ≤18 years</td><td>2034-2037</td><td>1</td><td>5</td></tr><tr><td>2</td><td>&gt;18 to ≤22 years</td><td>2038-2041</td><td>1</td><td>4</td></tr><tr><td>3</td><td>&gt;22 to ≤26 years</td><td>2042-2045</td><td>1</td><td>5</td></tr><tr><td>4</td><td>&gt;26 to ≤30 years</td><td>2046-2049</td><td>1</td><td>2</td></tr><tr><td>5</td><td>&gt;30 to ≤34 years</td><td>2050-2053</td><td>1</td><td>2</td></tr><tr><td>6</td><td>&gt;34 years and above</td><td>2054-2060</td><td>1 #</td><td>3</td></tr></table>	Bucket	Residual Maturity	Current Redemption Calendar Years	Minimum ISIN Requirement	Total ISINs in Bucket <sup>1</sup>	1	>14 to ≤18 years	2034-2037	1	5	2	>18 to ≤22 years	2038-2041	1	4	3	>22 to ≤26 years	2042-2045	1	5	4	>26 to ≤30 years	2046-2049	1	2	5	>30 to ≤34 years	2050-2053	1	2	6	>34 years and above	2054-2060	1 #	3
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		# For the last bucket in the yield curve, one ISIN maturing in its terminal year (currently 2060) will be needed compulsorily, to ensure smoothness of the ZCYC output of the cubic spline model."
7.	<p>Page 12 - Under the heading OUTPUT - point no1 - needs clarification.</p> <p>"In respect of ISINs whose VWAY are used as input into the model, they will be valued at <b>model</b> input prices/YTM"- based on what is mentioned in Page 3 under "Valuation of Gsec - Overarching Principle." The word" VWAY" in place of "model" will be more appropriate.</p> <p>Point No 2 - In respect of ISINs that are not used as inputs in the model but have VWAY that qualify the traded criteria, they will be valued at their traded output prices /YTM(VWAY).</p> <p>Point -3 In respect of ISINs that are not used as inputs into the model they will be valued at model output prices /YTM point (2) and (3) appear overlapping .</p> <p>If a security is traded on current week but not traded upto threshold criterion and was not an input will the valuation of the security be the model output or the traded level?</p> <p>Only non-traded securities need to valued based on model yield and AF.</p>	<p>The following changes are made to provide clarity:</p> <p>"In respect of ISINs whose VWAY are used as inputs into the model, they will be valued at their model input VWAY."</p> <p>Point no. 2 refers to traded ISINs meeting the threshold criteria of 3 trades and aggregate face value of ₹15crores, but due to the close proximity of two ISINs, only one ISIN can be used as input. The other ISIN will not be used as input but the eligible trades of that ISIN will be used for final VWAY, as it has met the threshold criteria.</p> <p>Note: This is a daily filter, out of two qualifying ISINs, one will be used as input based on previous week's data and both will be used for valuation (Traded VWAY).</p> <p>Point no. 3 refers to non-traded ISIN and traded ISIN not meeting threshold criteria.</p> <p>"In respect of ISINs that are not traded or do not fulfil the threshold criteria, they will be valued at their model output Prices/ YTM plus the adjustment factor."</p>
8.	<p>In page 3- Point 6. In the flow chart it is given that On the day of an auction: If no trades are available, then auction WAY; if 1 or 2 trades then a combination of auction WAY (3 trades &amp; ₹15 crores) plus the traded data. But in Page 5 - Point 6 it is given that If an auctioned ISIN is traded on the day of its auction, but with no more than two trades, then the auction WAY published by RBI will be taken as Level 1 data, the auction being considered as notionally equivalent to three trades with ₹5 crores as the face value of each trade.</p> <p>Narration in Page 3 and page 5 not in sync.</p>	<p>The following changes are made for clarity:</p> <p>"On the day of an auction: If there are 0, 1 and 2 trades available, auction WAY will be used."</p>
9.	Kindly confirm if the OMO will also be treated as an Auction and rules of auctioned security will apply.	<p>The following change is made:</p> <p>"OMOs (purchase/sale) conducted by RBI, will be treated like any auction data."</p>

Chief Executive Officer