

### Understanding Yield Differentials

When the 364-days TBill yield equaled that on the 10-year bond sometime back, there was interest generated in the market as to what could have caused this convergence. In fact, the difference between 1 year and 10 years has varied over time. A view can be that the 1 year yield is linked more the state of liquidity in the market and moves in accordance with the same. The 10-year yield takes a more nuanced long term view which is influenced more by what the RBI could be doing. Hence, expectations of no further rate hike which can be a prolonged pause or a 'pivot' can lead to a decline in such yields under ceteris Paribas conditions. Also actions such as switches in tenure of bonds or even bond auctions for longer tenures can affect such yields.

In this analysis the last 5 years are looked at and the differences noted. Weighted average yields for weeks on residual maturity of 1 and 10 years have been juxtaposed to study the relationship. Table 1 notes the same for half-year periods (calendar years) to make them comparable with the current running year of 2023. The standard deviation of the difference between 1 and 10 years maturity is also provided to indicate volatility.

**Table 1: Average difference between 1 and 10 year maturity Of GSecs  
(Residual maturity)**

Period	Average difference	Standard deviation
H1-2018	0.90	0.11
H2-2018	0.50	0.20
H1-2019	0.75	0.14
H2-2019	0.90	0.29
H1-2020	1.51	0.57
H2-2020	2.21	0.13
H1-2021	2.15	0.16
H2-2021	2.16	0.27
H1-2022	1.88	0.46
H2-2022	0.69	0.32
Jan-Apr 2023	0.28	0.11

Source: CMIE

Table 1 shows that there has been some kind of a pattern in the movement of the yield-differential over time. It tended to be less than 1 up to 2020. This was the time when the repo rate was also on the rise and had moved on an average basis from 6.1% in H1-2018 to 6.5% in H2-2018 before declining to 5.3% in H2-2019.

Once covid set in and the repo rate was lowered to 4%, which was retained for the next 18 months or so, the differential increased sharply to a range of 1.51-2.16%. This was more due to the lower tenure yields coming down sharply as the 10-year bond hovered around the 5.80-6.80% band. There was also surplus liquidity in the system which kept these yields depressed.

Subsequently as the RBI started raising the repo rate, the 10-year yield crossed the 7% mark and hovered in the range of 7.20-7.50%. The average differential came down to 0.69% in H2-2022 and further to 0.28% in H1-2023 (up to April). Here while the 10-year yield remained range bound, the 1

year yields rose due to the withdrawal of accommodation stance of the RBI which meant that surplus liquidity was drawn out.

A conclusion that can be drawn is that when the repo rate is at a higher level which pushes up the 10-year yield, though not proportionately, the difference with the 1 year yield reduces. It is low repo rates which tend to push down the 1-year yield further relative to 10-years that widens the differential.

To support this conclusion, the table below looks the average differential in yields sequentially in different phases during the same time period based on range of 10-year paper.

**Table 2: Average yield of 10-year paper and yield differential: Range-wise**

Range of 10-year's yield starting 2018 (%)	Average differential
7.35-8.00	0.83
8.0 +	0.51
7.3-8.0	0.36
7-7.3	0.74
6-7	1.08
5-6	2.20
6-7	2.16
7.3-7.5	0.65
Less than 7.30%	0.20

Source: CMIE

### Concluding remarks

Given that the RBI has worked towards withdrawal of accommodation and that liquidity has come down to stable levels, there should be less volatility in short-term yields. The 10-year yield has come down on expectations that the current rate cycle has already witnessed its peak and the direction will be downwards at the appropriate time. The government's gross borrowing programme of Rs 15.43 lakh crore (Rs 11.02 lakh crore of net borrowings) should not pose any threat to bond yields. Bank credit growth may also be expected to slow down from FY23 thus offering more funds for Gsec absorption as growth in deposits picks up at a higher rate. The differential would be range-bound at 0.50-0.65% under these assumptions.

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**For further details about this publication, please contact:**

Economics Research Department

Bank of Baroda

+91 22 6698 5143

[chief.economist@bankofbaroda.com](mailto:chief.economist@bankofbaroda.com)

[dipanwita.mazumdar@bankofbaroda.com](mailto:dipanwita.mazumdar@bankofbaroda.com)