FINANCIAL BENCHMARKS INDIA PVT LTD.

ISSUE:40 | June | 2022

FBIL Newsletter

## Section 1: New Developments

1. On May 04, 2022, the Reserve Bank of India increased the policy repo rate under liquidity adjustment facility (LAF) by 40 bps to 4.40 percent with immediate effect. Consequently, the standing deposit facility (SDF) rate and marginal standing facility (MSF) became 4.15% and 4.65%. Accordingly, the Standing Liquidity Facility provided to Primary Dealers (PDs) (collateralized liquidity support) from the Reserve Bank would be available at the revised repo rate of 4.40 per cent with effect from May 4, 2022.
2. The RBI on May 04, 2022, decided to increase the Cash Reserve Ratio (CRR) of all banks by 50 basis points from 4.00 percent to 4.50 percent of their Net Demand and Time Liabilities (NDTL), effective from the reporting fortnight beginning May 21, 2022.
3. The RBI on May 06, 2022, announced the interest rate for Floating Rate Bonds, 2024 (FRB 2024) to be 4.41 percent per annum. This rate would be applicable for the half year starting from May 07, 2022, to November 06, 2022.
4. On May 11, 2022, ISDA published a paper which outlined the key issues that policymakers in emerging and developing markets should consider when drawing up an appropriate legal and regulatory framework for derivatives.
5. Refinitiv Benchmark Services (UK) Limited (RBSL) on May 16, 2022, announced that calculation and publication of all remaining CDOR tenors will cease immediately after final publication on June 28, 2024. The fallbacks (i.e., to the adjusted risk-free rate plus spread) would automatically occur after June 28, 2024, for outstanding derivatives contracts that incorporate the IBOR Fallbacks Supplement.
6. The Alternative Reference Rates Committee (ARRC) on May 19, 2022, provided an update, announcing its endorsement of the CME Group's forward-looking 12-month Secured Overnight Financing Rate (SOFR) term rate for certain uses in line with its Best Practice Recommendations Related to Scope of Use.
7. According to analysis by ISDA and Clarus, 47% of total cleared over the counter and exchange-traded US dollar interest rate derivatives DV01 in April involved SOFR which was a record high in comparison to 25.3% in December last year.
8. European Commission has issued a Consultation Document which seeks feedback on further potential improvements in the functioning of the EU BMR, specifically as regards the rules applicable to third-country benchmarks and the impact on market participants of the full entry into application of the third country regime as of 1 January 2024.
9. Monetary Policy decisions of major economies:

| Countries/Economies | Date | New Policy Rate (%) | Change (percentage point) |
|---|---|---|---|
| Australia | May 03, 2022 | 0.35 | +0.25 |
| Canada | June 01, 2022 | 1.50 | +0.50 |
| European Central Bank | April 14, 2022 | 0.25 | Unchanged |
| Japan | April 28, 2022 | -0.10 | Unchanged |
| United Kingdom | May 05, 2022 | 1.00 | +0.25 |
| United States of America | May 04, 2022 | 0.75 - 1.00 | +0.50 |

## Section 2: Central Bank Activities

### i) RBI Money Market Operations during May 2022:

| Date | Type of Operation | Notified Amount(₹crore) | Weighted Average Rate(%) |
|---|---|---|---|
| **May 06,2022** | 14-day Variable Rate Reverse Repo auction | 6,00,000 | 4.39 |
| **May 17,2022** | 28-day Variable Rate Reverse Repo auction | 50,000 | 4.38 |
| **May 20,2022** | 14-day Variable Rate Reverse Repo auction | 4,00,000 | 4.39 |

### ii) Auctions of Central Government Securities during May 2022:

| Date | Security Description | Notified Amount(₹ crore) | Weighted Average YTM | Devolvement, if any |
|---|---|---|---|---|
| **May 06, 2022** | **5.74% GS 2026** | 9,000 | 7.2008% | NIL |
| | **GOI FRB 2028** | 4,000 | 5.3010% | NIL |
| | **6.67% GS 2035** | 10,000 | 7.6114% | NIL |
| | **6.99% GS 2051** | 9,000 | 7.7087% | NIL |
| **May 13, 2022** | **4.56% GS 2023** | 4,000 | 6.1533% | NIL |
| | **7.10% GS 2029** | 7,000 | 7.2400% | NIL |
| | **6.54% GS 2032** | 13,000 | 7.3290% | NIL |
| | **6.95% GS 2061** | 9,000 | 7.6204% | NIL |
| **May 20, 2022** | **5.74% GS 2026** | 9,000 | 7.1105% | NIL |
| | **GOI FRB 2034** | 4,000 | 6.4072% | NIL |
| | **New GS 2036** | 10,000 | 7.5400% | NIL |
| | **6.99% GS 2051** | 9,000 | 7.6174% | NIL |
| **May 27, 2022** | **4.56% GS 2023** | 4,000 | 6.1488% | ₹2,235.994 Crore |
| | **7.10% GS 2029** | 7,000 | 7.2307% | NIL |
| | **6.54% GS 2032** | 13,000 | 7.3390% | NIL |
| | **6.95% GS 2061** | 9,000 | 7.6260% | NIL |

### iii) Auctions of Treasury Bill

| | 91 Days | | 182 Days | | 364 Days | |
|---|---|---|---|---|---|---|
| | **Notified Amount** | **Auction WAY** | **Notified Amount** | **Auction WAY** | **Notified Amount** | **Auction WAY** |
| **May 04, 2022** | ₹13,000 Crore | 4.0175% | ₹12,000 Crore | 4.4145% | ₹8,000 Crore | 4.8162% |
| **May 11, 2022** | ₹13,000 Crore | 4.8447% | ₹12,000 Crore | 5.3419% | ₹8,000 Crore | 5.8404% |
| **May 18, 2022** | ₹13,000 Crore | 4.8827% | ₹12,000 Crore | 5.4008% | ₹8,000 Crore | 5.9011% |
| **May 04, 2022** | ₹13,000 Crore | 4.8749% | ₹12,000 Crore | 5.3913% | ₹8,000 Crore | 5.8909% |

### iv) Switch/Conversion Auctions during March 2022: May 23, 2022

| Source Securities | Notified Amount | Destination Securities | Cut-off Yield(%) |
|---|---|---|---|
| **7.16% GS 2023** | ₹1,000 Crore | 6.95% GS 2061 | NA |
| **7.68% GS 2023** | ₹2,000 Crore | 6.95% GS 2061 | NA |
| **7.68% GS 2023** | ₹3,000 Crore | 7.57% GS 2033 | 7.4601 |
| **7.37% GS 2023** | ₹4,000 Crore | 7.95% GS 2032 | 7.4396 |

| | | | |
|---|---|---|---|
| **7.32% GS 2024** | ₹3,000 Crore | 7.95% GS 2032 | 7.4383 |
| **8.83% GS 2023** | ₹3,000 Crore | 7.88% GS 2030 | 7.3556 |

## Section 3: MARKET WATCH

**Benchmark:** FBIL MIBOR (Mumbai Interbank Outright Rate)
**Category:** Rupee Interest Rate
**Type:** Traded data (Volume in ₹ croresrs and rates in %)*
**Source:** NDS Call (Negotiated Dealing System). Daily first hour data (9:00 AM to 10:00 AM)

| | Volume | No. of Transactions | Rate |
|---|---|---|---|
| **Jun-21** | 1312.00 | 17 | 3.37 |
| **Jul-21** | 1942.29 | 19 | 3.38 |
| **Aug-21** | 1737.33 | 19 | 3.38 |
| **Sep-21** | 1267.05 | 16 | 3.38 |
| **Oct-21** | 2436.82 | 24 | 3.41 |
| **Nov-21** | 2846.11 | 23 | 3.43 |
| **Dec-21** | 2942.54 | 29 | 3.54 |
| **Jan-22** | 2200.28 | 23 | 3.72 |
| **Feb-22** | 2017.34 | 18 | 3.47 |
| **Mar-22** | 1815.00 | 22 | 3.50 |
| **Apr-22** | 2401.42 | 26 | 3.71 |
| **May-22** | 3754.85 | 32 | 4.23 |

**Benchmark:** FBIL MROR (Market Repo Overnight Rate)
**Category:** Rupee Interest Rate
**Type:** Traded data (Vol in ₹Crs and rates in %)*
**Source:** CROMS (Clearcorp Repo Order Matching System). Daily first hour data (9:00 am to 10:00 am)

| | Volume | No. of Transactions | Rate |
|---|---|---|---|
| **Jun-21** | 60325.98 | 188 | 3.31 |
| **Jul-21** | 46170.96 | 162 | 3.26 |
| **Aug-21** | 42249.29 | 150 | 3.17 |
| **Sep-21** | 42801.24 | 138 | 3.23 |
| **Oct-21** | 47896.83 | 159 | 3.27 |
| **Nov-21** | 54404.00 | 175 | 3.37 |
| **Dec-21** | 54568.10 | 184 | 3.48 |
| **Jan-22** | 54647.90 | 179 | 3.65 |
| **Feb-22** | 51639.73 | 162 | 3.44 |
| **Mar-22** | 60054.00 | 188 | 3.50 |
| **Apr-22** | 47363.55 | 157 | 3.64 |
| **May-22** | 48386.84 | 159 | 4.11 |

**Benchmark:** FBIL CD Rates (Certificate of Deposit)
**Category:** Rupee Interest Rate
**Type:** Traded data (Vol in ₹Crs and rates in %)*
**Source:** Reported data on FTRAC platform of CCIL

| | 14 D | | | 1 M | | | 2 M | | | 3 M | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Vol** | **Tr** | **Rate** | **Vol** | **Tr** | **Rate** | **Vol** | **Tr** | **Rate** | **Vol** | **Tr** | **Rate** |
| **Jun-21** | 507.50 | 4 | 3.36 | 350.00 | 4 | 3.41 | 201.25 | 3 | 3.43 | 350.00 | 4 | 3.49 |
| **Jul-21** | 350.00 | 5 | 3.34 | 400.00 | 5 | 3.46 | 498.00 | 4 | 3.40 | 173.00 | 3 | 3.54 |
| **Aug-21** | 0 | 0 | 3.20# | 176.67 | 3 | 3.26 | 0 | 0 | 3.39# | 75.00 | 3 | 3.39 |
| **Sep-21** | 518.33 | 3 | 3.25 | 325.00 | 1 | 3.27 | 300.00 | 1 | 3.38 | 0 | 0 | 3.42# |
| **Oct-21** | 0 | 0 | 3.43# | 500.00 | 6 | 3.49 | 200.00 | 3 | 3.46 | 125.00 | 4 | 3.55 |
| **Nov-21** | 600.00 | 4 | 3.33 | 0 | 0 | 3.56# | 150.00 | 3 | 3.53 | 242.00 | 4 | 3.55 |
| **Dec-21** | 0 | 0 | 3.28# | 356.67 | 5 | 3.52 | 276.25 | 4 | 3.49 | 262.50 | 4 | 3.62 |
| **Jan-22** | 225.00 | 5 | 3.40 | 370.00 | 6 | 3.63 | 165.00 | 4 | 3.60 | 493.75 | 5 | 3.78 |
| **Feb-22** | 276.67 | 4 | 3.65 | 277.73 | 5 | 3.64 | 395.00 | 5 | 3.74 | 590.42 | 6 | 3.88 |
| **Mar-22** | 346.67 | 5 | 3.65 | 598.13 | 6 | 3.82 | 444.38 | 5 | 3.90 | 598.57 | 7 | 4.00 |
| **Apr-22** | 571.00 | 5 | 3.64 | 216.00 | 4 | 3.67 | 353.00 | 5 | 3.80 | 274.00 | 5 | 3.84 |
| **May-22** | 787.92 | 8 | 4.32 | 621.54 | 8 | 4.47 | 308.33 | 4 | 4.75 | 572.86 | 6 | 4.94 |

# Calculated Rate

*The volumes (Vol), no. of trades (Tr) and rate are based on the daily average trades for a month.

**Benchmark:** FBIL T-Bill Rates (Treasury Bills)

**Category:** Rupee Interest Rate

**Type:** Traded data (Vol in ₹Crs and rates in %)*

**Source:** NDS – OM (Negotiated Dealing System-Order Matching)

| | 3M | | | 6M | | | 12M | | |
|---|---|---|---|---|---|---|---|---|---|
| | Vol | Tr | Rate | Vol | Tr | Rate | Volume | Tr | Rate |
| **Jun-21** | 3011.49 | 21 | 3.41 | 1640.40 | 17 | 3.64 | 537.85 | 9 | 3.78 |
| **Jul-21** | 1612.29 | 18 | 3.40 | 977.76 | 18 | 3.55 | 390.26 | 7 | 3.76 |
| **Aug-21** | 2391.62 | 23 | 3.34 | 592.90 | 11 | 3.44 | 381.18 | 8 | 3.64 |
| **Sep-21** | 1840.89 | 18 | 3.32 | 509.69 | 8 | 3.40 | 414.68 | 9 | 3.58 |
| **Oct-21** | 1357.43 | 13 | 3.45 | 462.28 | 7 | 3.62 | 770.03 | 12 | 3.88 |
| **Nov-21** | 921.66 | 10 | 3.53 | 578.50 | 8 | 3.73 | 568.54 | 9 | 4.07 |
| **Dec-21** | 1734.04 | 14 | 3.56 | 486.71 | 9 | 3.85 | 494.85 | 10 | 4.17 |
| **Jan-22** | 1227.87 | 14 | 3.62 | 1168.43 | 14 | 4.03 | 514.59 | 11 | 4.38 |
| **Feb-22** | 1568.51 | 11 | 3.74 | 1509.75 | 18 | 4.06 | 550.70 | 10 | 4.25 |
| **Mar-22** | 2233.03 | 18 | 3.79 | 2518.37 | 27 | 4.27 | 808.08 | 14 | 4.59 |
| **Apr-22** | 2180.00 | 21 | 3.93 | 1842.00 | 20 | 4.31 | 660.00 | 13 | 4.70 |
| **May-22** | 1797.00 | 18 | 4.70 | 1152.00 | 14 | 5.21 | 1151.00 | 13 | 5.67 |

**Benchmark:** FBIL MIBOR OIS (Overnight Index Swap)

**Category:** Rupee Interest Rate

**Type:** Traded data (Vol in ₹Crs and rates in %)*

**Source:** Deals traded on ASTROID platform of CCIL

| | 3M | | | 6M | | | 1Y | | | 5Y | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vol | Tr | Rate | Vol | Tr | Rate | Vol | Tr | Rate | Vol | Tr | Rate |
| **Jun-21** | 1575.71 | 11 | 3.47 | 1960.22 | 15 | 3.56 | 3995.68 | 45 | 3.80 | 3208.22 | 99 | 5.22 |
| **Jul-21** | 1258.33 | 9 | 3.49 | 2889.29 | 26 | 3.62 | 4187.86 | 53 | 3.90 | 3345.95 | 99 | 5.30 |
| **Aug-21** | 2446.92 | 23 | 3.50 | 2365.75 | 28 | 3.64 | 3557.25 | 46 | 3.91 | 2866.00 | 86 | 5.20 |
| **Sep-21** | 2248.33 | 17 | 3.49 | 3460.71 | 32 | 3.62 | 4152.14 | 47 | 3.88 | 3307.62 | 97 | 5.18 |
| **Oct-21** | 1266.67 | 9 | 3.64 | 1055.00 | 12 | 3.82 | 5130.79 | 54 | 4.13 | 4181.05 | 141 | 5.52 |
| **Nov-21** | 627.27 | 6 | 3.71 | 1509.17 | 14 | 3.93 | 2994.21 | 37 | 4.30 | 3594.84 | 124 | 5.49 |
| **Dec-21** | 1329.62 | 11 | 3.79 | 1409.05 | 15 | 3.98 | 3693.26 | 45 | 4.30 | 2941.74 | 103 | 5.34 |
| **Jan-22** | 2325.00 | 16 | 3.83 | 840.59 | 10 | 4.04 | 5149.75 | 61 | 4.41 | 5143.00 | 162 | 5.61 |
| **Feb-22** | 1885.00 | 16 | 3.84 | 2311.39 | 19 | 4.03 | 5589.74 | 61 | 4.38 | 6061.32 | 194 | 5.76 |
| **Mar-22** | 2017.64 | 12 | 3.86 | 3176.42 | 24 | 4.10 | 5665.95 | 63 | 4.49 | 5006.90 | 162 | 5.94 |
| **Apr-22** | 1672.65 | 14 | 3.97 | 1709.44 | 18 | 4.30 | 6896.11 | 92 | 4.85 | 4861.39 | 166 | 6.40 |
| **May-22** | 2204.06 | 14 | 4.80 | 2395.53 | 22 | 5.32 | 8529.47 | 115 | 6.05 | 4364.37 | 156 | 6.97 |

**Benchmark:** FBIL MIFOR (Mumbai Interbank Forward Outright Rate)
**Category:** Interest Rate
**Type:** Traded data (Rates in %)*
**Source:** LIBOR (London Interbank Offer Rate) data from ICE (Intercontinental Exchange) and FBIL USD/INR Forward Premia curve

| | O/N | 1M | 2M | 3M | 6M | 12M |
|---|---|---|---|---|---|---|
| **Jun-21** | 3.61 | 4.17 | 4.29 | 4.36 | 4.50 | 4.79 |
| **Jul-21** | 3.65 | 3.93 | 4.04 | 4.17 | 4.35 | 4.75 |
| **Aug-21** | 3.45 | 3.61 | 3.75 | 3.84 | 4.03 | 4.55 |
| **Sep-21** | 3.41 | 3.52 | 3.65 | 3.75 | 4.04 | 4.63 |
| **Oct-21** | 3.58 | 4.23 | 4.28 | 4.40 | 4.91 | 5.02 |
| **Nov-21** | 3.83 | 3.94 | 4.13 | 4.16 | 4.98 | 5.16 |
| **Dec-21** | 3.59 | 3.85 | 3.92 | 4.15 | 4.94 | 5.18 |
| **Jan-22** | 3.80 | 3.98 | 4.53 | 5.13 | 5.20 | 5.48 |
| **Feb-22** | 3.44 | 4.11 | 4.88 | 4.99 | 5.04 | 5.43 |
| **Mar-22** | 3.93 | 5.67 | 5.25 | 5.23 | 5.35 | 5.82 |
| **Apr-22** | 4.25 | 4.65 | 4.81 | 5.08 | 5.61 | 6.45 |
| **May-22** | 4.25 | 4.58 | 4.89 | 5.20 | 5.78 | 6.76 |

**Benchmark:** FBIL Reference Rate
**Category:** Forex Rate
**Type:** Traded data (USD/INR) and Quotes (Cross-currencies)
**Source:** FX Clear & Refinitiv

| | Tr | Vol | INR/1 USD | INR/1 GBP | INR/1 EUR | INR/100 JPY |
|---|---|---|---|---|---|---|
| **Jun-21** | 248 | 294.77 | 73.5583 | 103.2147 | 88.6642 | 66.82 |
| **Jul-21** | 226 | 271.10 | 74.5270 | 102.9714 | 88.1296 | 67.57 |
| **Aug-21** | 190 | 236.35 | 74.1846 | 102.3972 | 87.3473 | 67.53 |
| **Sep-21** | 217 | 246.40 | 73.5634 | 101.0522 | 86.6013 | 66.76 |
| **Oct-21** | 269 | 312.73 | 74.9152 | 102.4804 | 86.8975 | 66.30 |
| **Nov-21** | 226 | 277.29 | 74.4965 | 100.2397 | 84.9463 | 65.32 |
| **Dec-21** | 204 | 228.43 | 75.3725 | 100.2905 | 85.1921 | 66.15 |
| **Jan-22** | 193 | 227.33 | 74.4416 | 100.9567 | 84.3004 | 64.77 |
| **Feb-22** | 230 | 262.26 | 75.0031 | 101.5163 | 84.9742 | 65.10 |
| **Mar-22** | 302 | 353.50 | 76.2445 | 100.3905 | 83.9301 | 64.27 |
| **Apr-22** | 387 | 440.58 | 76.1678 | 98.4685 | 82.2865 | 60.20 |
| **May-22** | 251 | 287.20 | 77.3193 | 96.3058 | 81.8147 | 60.02 |

(Vol in USD Mio and Tr: pertains to USD/INR).
The INR rates are against 1 unit of USD, GBP, EUR and 100 units of JPY.

**Benchmark:** FBIL Forward Premia Curve

**Category:** Forex Rate

**Type:** Traded data (Vol in $Mio and rates in %)

**Source:** USD/INR Trades reported to CCIL

| | CT | | | 1M | | | 3M | | | 6M | | | 12M | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vol | Tr | Rate | Vol | Tr | Rate | Vol | Tr | Rate | Vol | Tr | Rate | Vol | Tr | Rate |
| **Jun-21** | 4215.45 | 157 | 3.55 | 1287.59 | 35 | 4.07 | 331.29 | 17 | 4.22 | 307.21 | 21 | 4.33 | 969.59 | 130 | 4.53 |
| **Jul-21** | 5279.76 | 162 | 3.56 | 1024.62 | 34 | 3.83 | 263.19 | 14 | 4.04 | 158.38 | 11 | 4.18 | 526.10 | 61 | 4.49 |
| **Aug-21** | 5461.46 | 153 | 3.38 | 876.63 | 23 | 3.52 | 274.04 | 14 | 3.71 | 100.50 | 9 | 3.88 | 720.25 | 91 | 4.30 |
| **Sep-21** | 4925.18 | 147 | 3.34 | 916.63 | 25 | 3.49 | 265.31 | 16 | 3.62 | 129.60 | 9 | 3.89 | 560.67 | 73 | 4.39 |
| **Oct-21** | 5022.47 | 155 | 3.41 | 660.26 | 20 | 3.79 | 216.25 | 19 | 4.00 | 161.71 | 13 | 4.50 | 437.37 | 56 | 4.54 |
| **Nov-21** | 5179.94 | 152 | 3.75 | 656.74 | 24 | 3.85 | 287.83 | 20 | 4.00 | 173.08 | 11 | 4.74 | 403.67 | 46 | 4.74 |
| **Dec-21** | 5013.54 | 155 | 3.52 | 908.64 | 36 | 3.75 | 341.73 | 22 | 3.93 | 187.06 | 14 | 4.62 | 721.57 | 78 | 4.63 |
| **Jan-22** | 5107.08 | 153 | 3.79 | 1102.39 | 41 | 3.86 | 661.00 | 34 | 4.85 | 162.21 | 11 | 4.76 | 753.88 | 78 | 4.68 |
| **Feb-22** | 4765.32 | 165 | 3.38 | 917.21 | 37 | 3.88 | 717.84 | 53 | 4.53 | 194.64 | 28 | 4.30 | 2180.52 | 278 | 4.17 |
| **Mar-22** | 5010.06 | 184 | 3.73 | 1074.91 | 46 | 5.26 | 690.49 | 41 | 4.36 | 107.53 | 11 | 4.08 | 1778.26 | 229 | 3.97 |
| **Apr-22** | 6131.24 | 195 | 3.92 | 1766.49 | 64 | 4.03 | 468.14 | 28 | 3.94 | 373.56 | 27 | 3.90 | 1719.21 | 213 | 3.94 |
| **May-22** | 5664.89 | 203 | 3.47 | 1709.43 | 62 | 3.62 | 546.05 | 32 | 3.70 | 412.71 | 33 | 3.70 | 2079.36 | 266 | 3.94 |

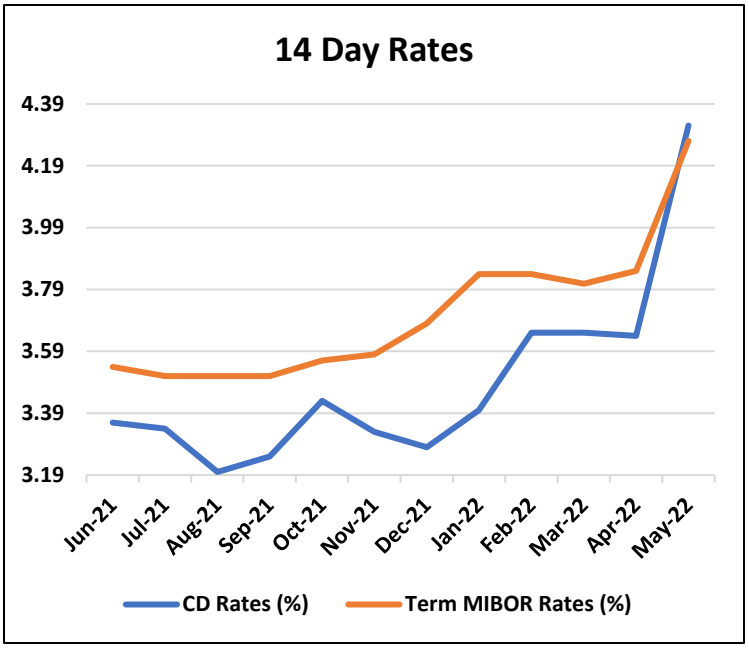
**Benchmark:** FC (Foreign Currency) Rupee Option Volatility Rate

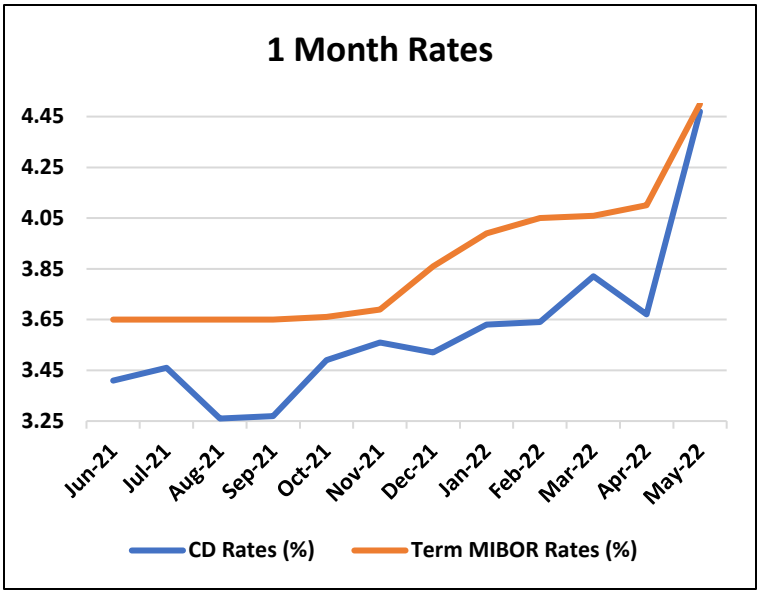
**Category:** Forex Rate **Type:** Polled data (Quotes in %) **Source:** 14 Submitters

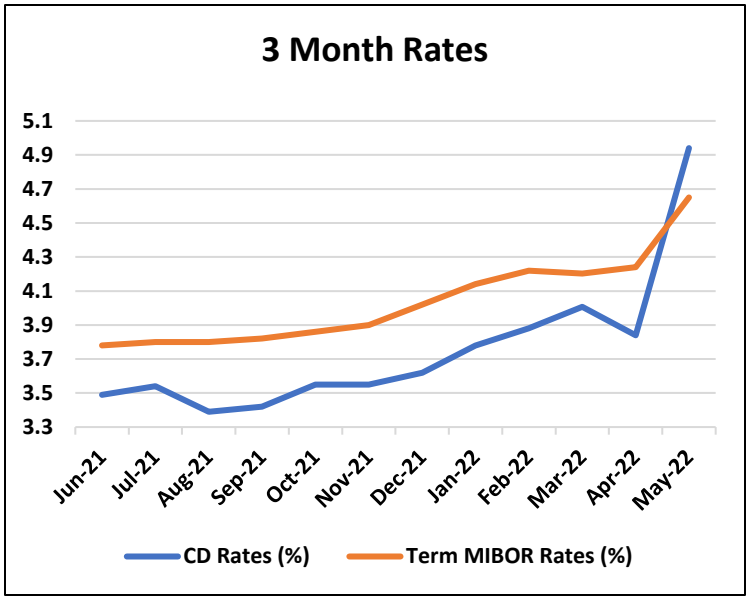
| | 1 WEEK | | | 1 MONTH | | | 3 MONTHS | | | 6 MONTHS | | | 12 MONTHS | | | Submission data FC Rupee |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ATM Vols | 25D | | ATM Vols | 25D | | ATM Vols | 25D | | ATM Vols | 25D | | ATM Vols | 25D | | |
| | Mid | RR | STR | Mid | RR | STR | Mid | RR | STR | Mid | RR | STR | Mid | RR | STR | |
| **Jun-21** | 4.18 | 0.71 | 0.14 | 4.66 | 0.74 | 0.16 | 5.12 | 0.74 | 0.26 | 5.45 | 0.75 | 0.32 | 5.77 | 0.77 | 0.39 | 14 |
| **Jul-21** | 4.44 | 0.64 | 0.14 | 4.73 | 0.60 | 0.14 | 5.20 | 0.70 | 0.24 | 5.56 | 0.73 | 0.30 | 5.86 | 0.76 | 0.30 | 14 |
| **Aug-21** | 3.96 | 0.40 | 0.12 | 4.26 | 0.41 | 0.09 | 4.86 | 0.52 | 0.20 | 5.42 | 0.59 | 0.27 | 5.86 | 0.65 | 0.36 | 14 |
| **Sep-21** | 4.06 | 0.14 | 0.11 | 4.15 | 0.26 | 0.09 | 4.60 | 0.43 | 0.18 | 5.13 | 0.52 | 0.24 | 5.57 | 0.59 | 0.33 | 14 |
| **Oct-21** | 4.58 | 0.46 | 0.11 | 4.62 | 0.51 | 0.09 | 4.90 | 0.53 | 0.18 | 5.33 | 0.57 | 0.24 | 5.74 | 0.60 | 0.33 | 14 |
| **Nov-21** | 4.34 | 0.35 | 0.11 | 4.53 | 0.43 | 0.09 | 4.83 | 0.48 | 0.18 | 5.25 | 0.57 | 0.23 | 5.64 | 0.58 | 0.33 | 14 |
| **Dec-21** | 4.23 | 0.37 | 0.11 | 4.39 | 0.36 | 0.09 | 4.77 | 0.42 | 0.18 | 5.14 | 0.51 | 0.23 | 5.49 | 0.56 | 0.32 | 14 |
| **Jan-22** | 4.22 | 0.28 | 0.11 | 4.36 | 0.27 | 0.09 | 4.67 | 0.34 | 0.16 | 5.00 | 0.43 | 0.19 | 5.34 | 0.44 | 0.26 | 14 |
| **Feb-22** | 4.90 | 0.44 | 0.11 | 4.73 | 0.42 | 0.10 | 4.89 | 0.47 | 0.13 | 5.19 | 0.53 | 0.16 | 5.57 | 0.54 | 0.24 | 14 |
| **Mar-22** | 7.05 | 0.81 | 0.17 | 6.46 | 0.78 | 0.17 | 6.22 | 0.81 | 0.19 | 6.12 | 0.80 | 0.22 | 6.10 | 0.80 | 0.28 | 14 |
| **Apr-22** | 5.26 | 0.48 | 0.16 | 5.53 | 0.60 | 0.14 | 5.67 | 0.66 | 0.19 | 5.81 | 0.73 | 0.21 | 5.99 | 0.74 | 0.27 | 14 |
| **May-22** | 5.52 | 0.76 | 0.16 | 5.82 | 0.84 | 0.17 | 6.03 | 0.89 | 0.19 | 6.18 | 0.91 | 0.22 | 6.33 | 0.93 | 0.27 | 14 |

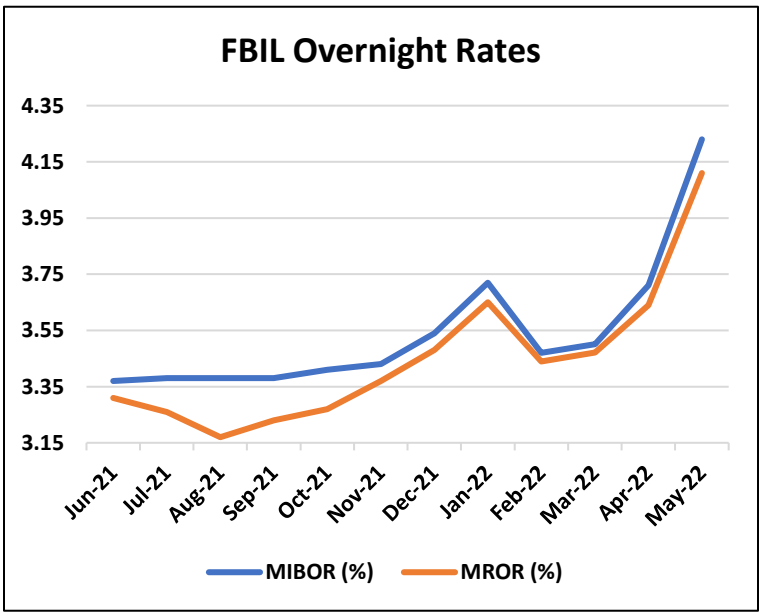
**Benchmark:** FBIL Term MIBOR
**Category:** Rupee Interest Rate
**Type:** Polled data (Quotes in %) **Source:** 16 Submitters

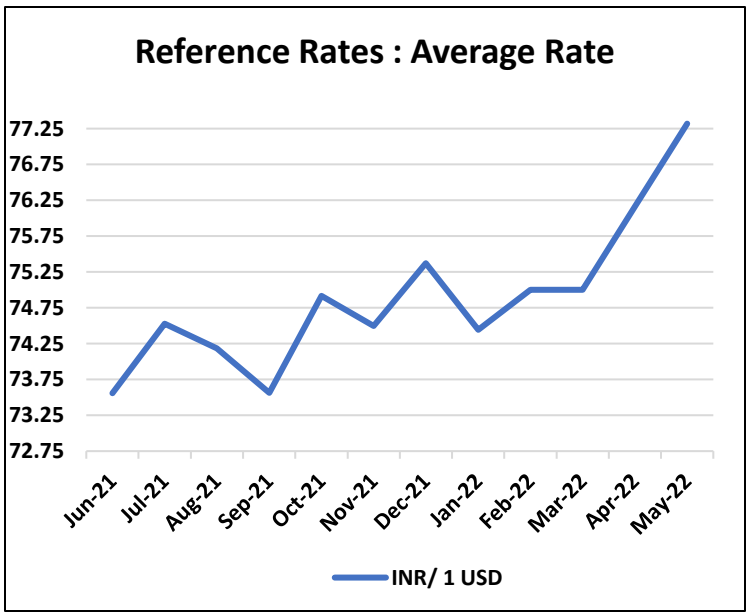
| | 14D | 1M | 3M | Submission Received |
|---|---|---|---|---|
| Jun-21 | 3.54 | 3.65 | 3.78 | 16 |
| Jul-21 | 3.51 | 3.65 | 3.80 | 16 |
| Aug-21 | 3.51 | 3.65 | 3.80 | 16 |
| Sep-21 | 3.51 | 3.65 | 3.82 | 16 |
| Oct-21 | 3.56 | 3.66 | 3.86 | 16 |
| Nov-21 | 3.58 | 3.69 | 3.90 | 16 |
| Dec-21 | 3.68 | 3.86 | 4.02 | 16 |
| Jan-22 | 3.84 | 3.99 | 4.14 | 16 |
| Feb-22 | 3.84 | 4.05 | 4.22 | 16 |
| Mar-22 | 3.81 | 4.06 | 4.20 | 16 |
| Apr-22 | 3.85 | 4.10 | 4.24 | 16 |
| May-22 | 4.27 | 4.50 | 4.65 | 16 |

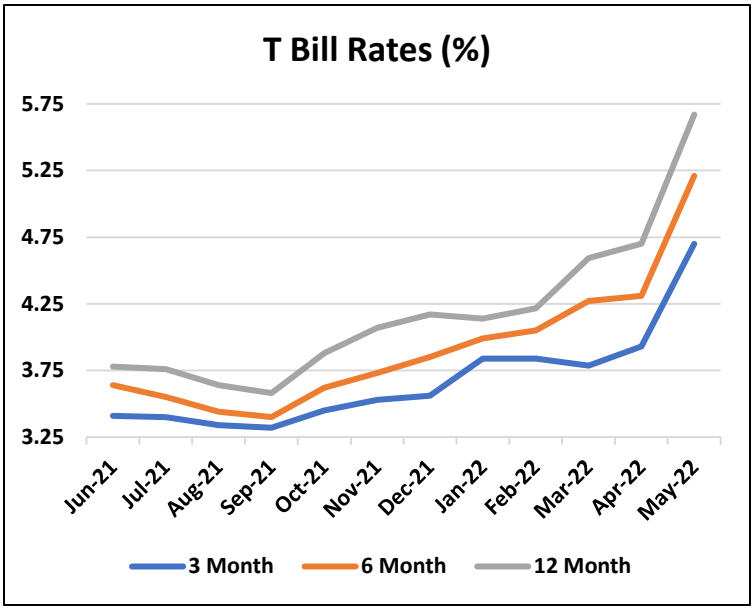


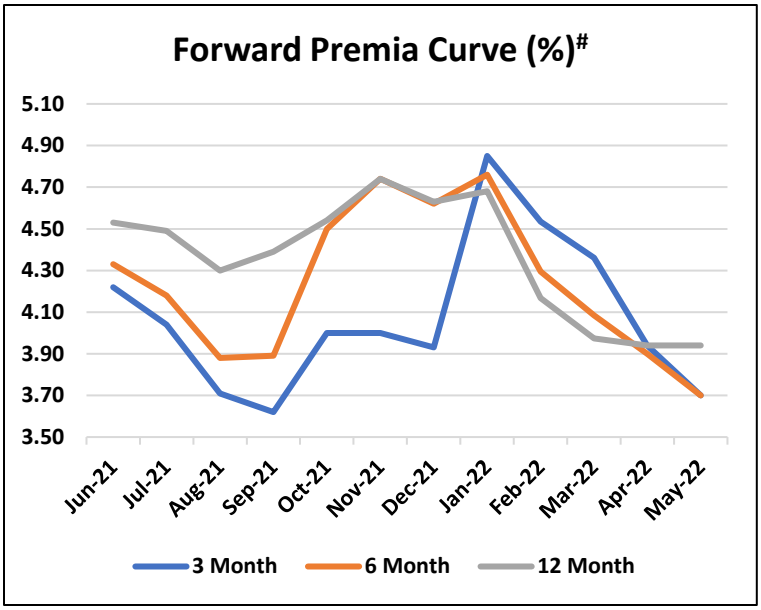



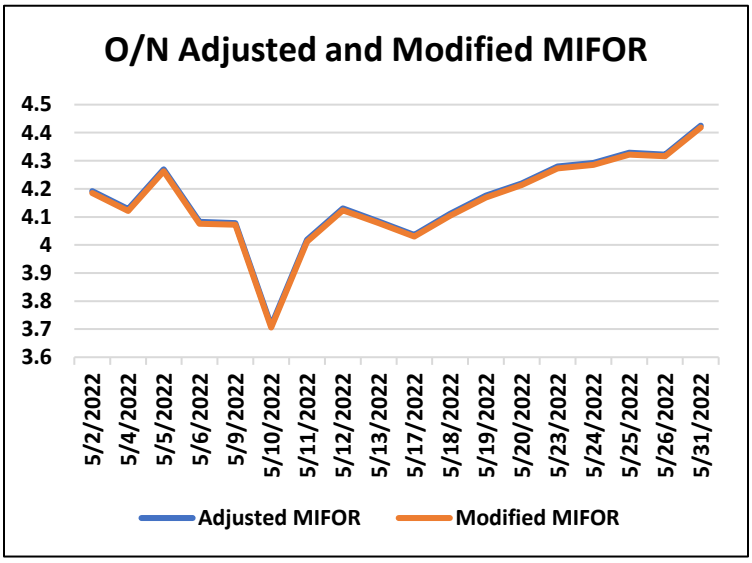



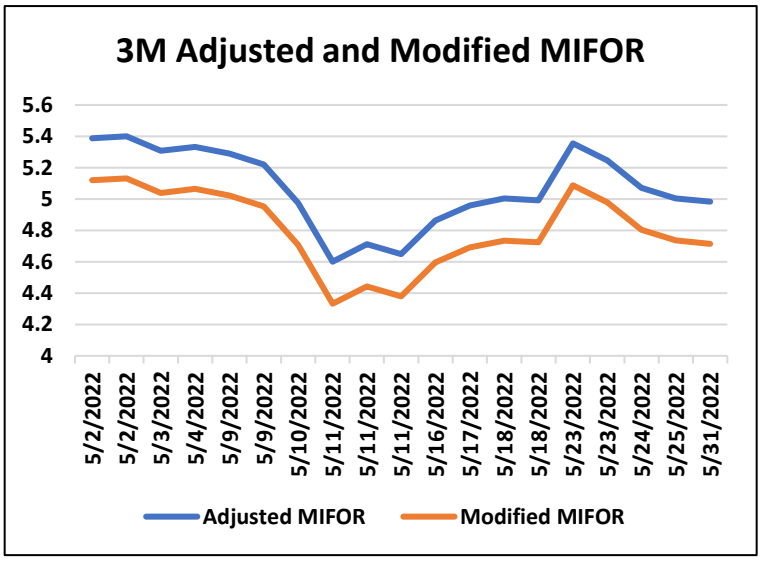



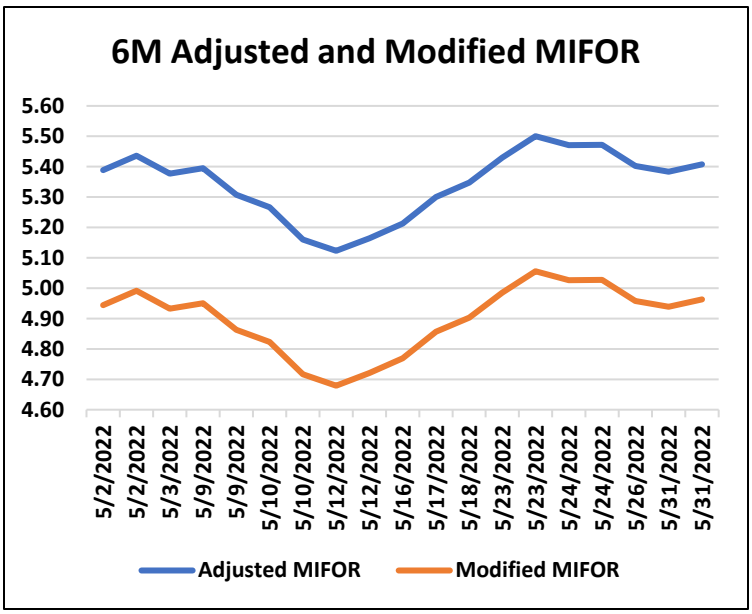



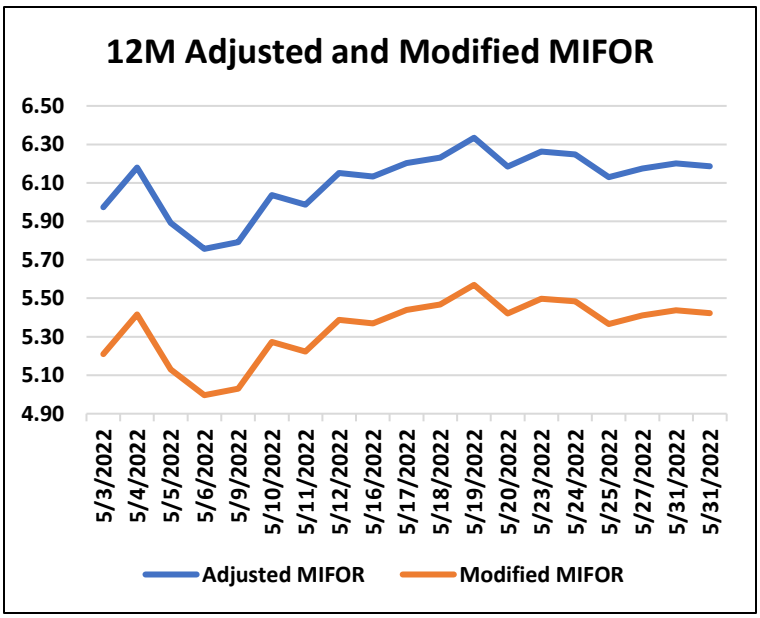


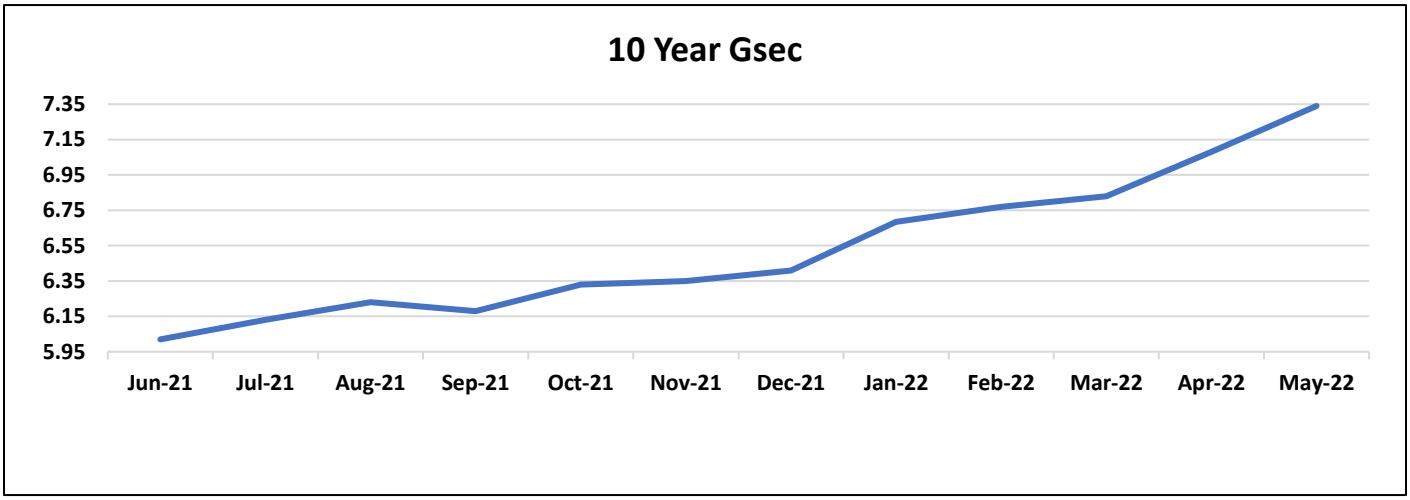




#The unusual spike in 3M rate was due to year end effect.

## Top 5 traded G-Sec during the Month of May 2022

| Security | Volume(₹ Crores) | | Trades | | YTM(%) | | |
|---|---|---|---|---|---|---|---|
| | Total Volume | Average daily Volume | Total Trades | Average daily trades | Weighted Average YTM | Minimum | Maximum |
| 06.54 GOVT. STOCK 2032 | 3,35,452 | 18,636 | 34,553 | 1,920 | 7.34 | 7.11 | 7.49 |
| 05.74 GOVT. STOCK 2026 | 70,125 | 3,896 | 6,216 | 345 | 7.07 | 6.65 | 7.3 |
| 06.67 GOVT. STOCK 2035 | 63,410 | 3,523 | 7,771 | 432 | 7.52 | 7.3 | 7.68 |
| 06.10 GOVT. STOCK 2031 | 28,742 | 1,597 | 3,030 | 168 | 7.36 | 7.15 | 7.5 |
| 05.63 GOVT. STOCK 2026 | 21,905 | 1,217 | 1,733 | 96 | 6.99 | 6.47 | 7.22 |

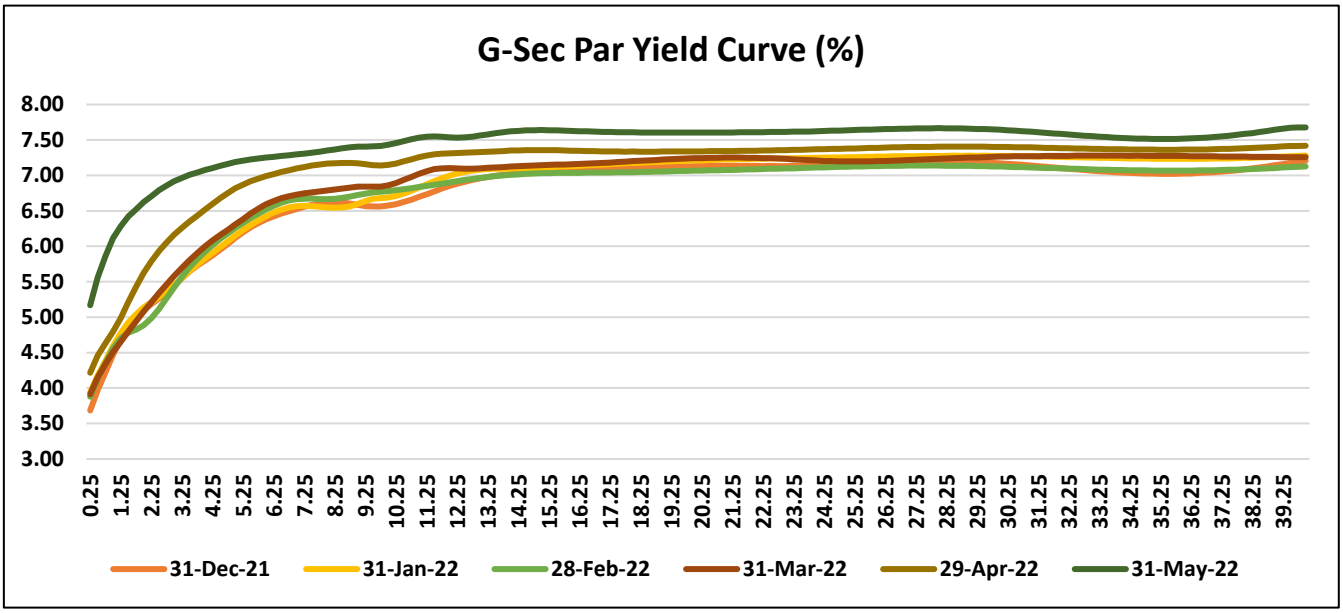



## Average GSEC Yields (%) of selected Maturities#

| | 5 Year | 10 Year | 40 Year |
|---|---|---|---|
| Dec-21 | 5.92 | 6.41 | 6.99 |
| Jan-22 | 6.19 | 6.68 | 7.25 |
| Feb-22 | 6.26 | 6.77 | 7.18 |
| Mar-22 | 6.35 | 6.83 | 7.25 |
| Apr-22 | 6.69 | 7.08 | 7.41 |
| May-22 | 7.14 | 7.34 | 7.62 |

**#The ISINs are choosen by taking nearest one on the basis of residual maturities for respective month-ends**
**5 Year : 8.15% GS 2026 for Dec 21; 8.24% GS 2027 for Jan 22, Feb 22 and Mar 22; 6.79% GS 2027 for Apr 22 and May 22.**
**10 Year : 6.10% GS 2031 for Nov 21 and Dec 21; 6.54% GS 2032 for Jan 22, Feb 22, Mar 22, Apr 22 and May 22.**
**40 Year : 6.95% GS 2061 for Nov 21, Dec 21, Jan 22, Feb 22, Mar 22, Apr 22 and May 22.**

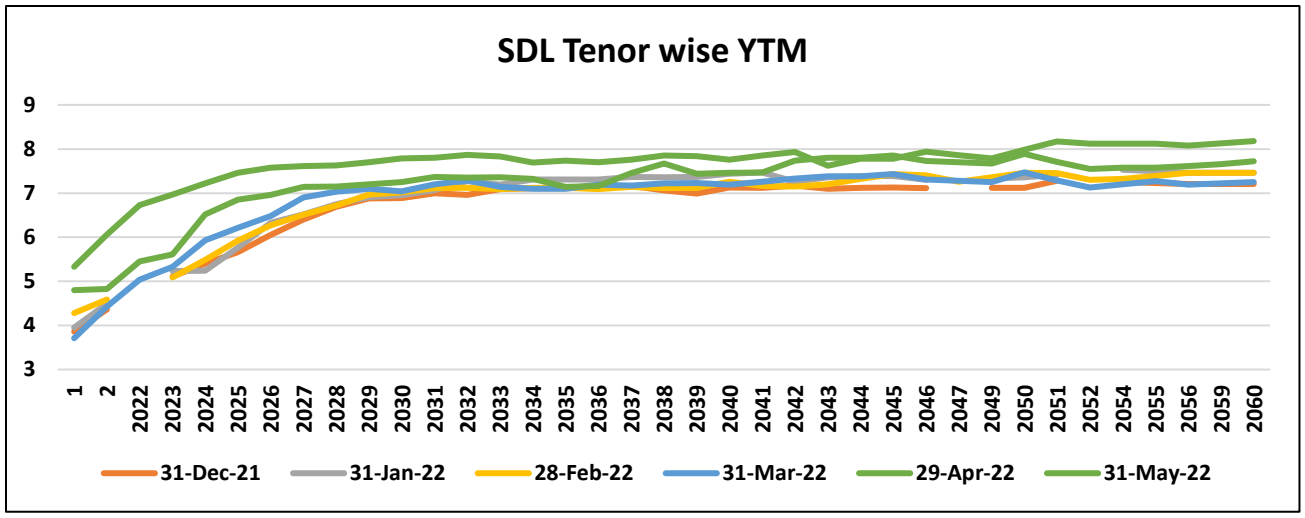
## Month-end Par Yield (Semi Annual) of G-Sec for select tenors




## Par-Yield Curve of selected tenors

| Tenor | 31-Dec-21 | 31-Jan-22 | 28-Feb-22 | 31-Mar-22 | 29-Apr-22 | 31-May-22 |
|---|---|---|---|---|---|---|
| **1** | 4.42 | 4.59 | 4.56 | 4.51 | 4.80 | 6.11 |
| **2** | 5.04 | 5.14 | 4.89 | 5.08 | 5.63 | 6.63 |
| **3** | 5.37 | 5.46 | 5.42 | 5.58 | 6.16 | 6.92 |
| **4** | 5.72 | 5.82 | 5.92 | 6.00 | 6.52 | 7.08 |
| **5** | 6.03 | 6.15 | 6.26 | 6.31 | 6.82 | 7.19 |
| **10** | 6.47 | 6.69 | 6.78 | 6.86 | 7.15 | 7.43 |
| **15** | 6.92 | 7.11 | 7.03 | 7.14 | 7.36 | 7.64 |
| **20** | 7.01 | 7.21 | 7.07 | 7.24 | 7.34 | 7.61 |
| **25** | 7.04 | 7.26 | 7.12 | 7.20 | 7.38 | 7.64 |
| **30** | 7.05 | 7.28 | 7.12 | 7.26 | 7.40 | 7.64 |
| **35** | 6.91 | 7.24 | 7.07 | 7.28 | 7.36 | 7.52 |
| **40** | 7.08 | 7.28 | 7.12 | 7.26 | 7.42 | 7.68 |

## Month-end SDL Average YTM

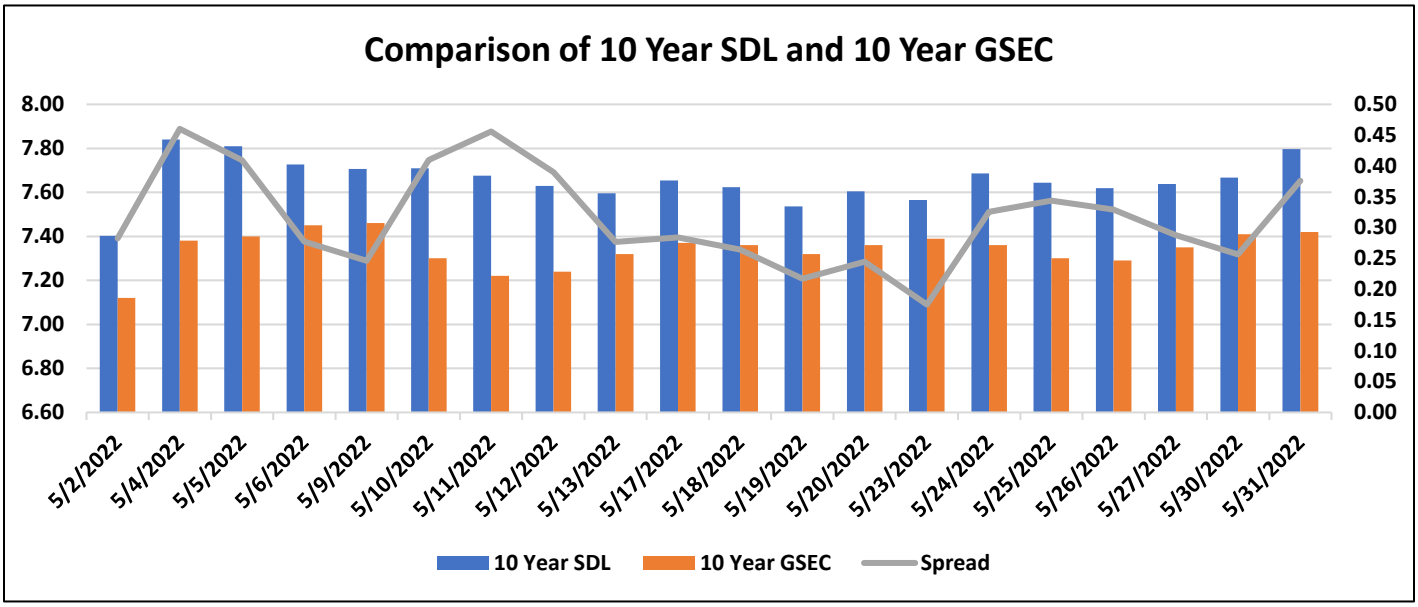



| SDL AVERAGE YTM | | | | | | |
|---|---|---|---|---|---|---|
| Maturity Year | 31-Dec-21 | 31-Jan-22 | 28-Feb-22 | 31-Mar-22 | 29-Apr-22 | 31-May-22 |
| 1 | 3.86 | 3.95 | 4.28 | 3.71 | 4.80 | 5.33 |
| 2 | 4.36 | 4.49 | 4.59 | 4.43 | 4.83 | 6.06 |
| 2022 | | | | 5.04 | 5.45 | 6.73 |
| 2023 | 5.11 | 5.23 | 5.09 | 5.33 | 5.61 | 6.97 |
| 2024 | 5.40 | 5.24 | 5.49 | 5.93 | 6.52 | 7.22 |
| 2025 | 5.66 | 5.76 | 5.92 | 6.21 | 6.85 | 7.46 |
| 2026 | 6.05 | 6.33 | 6.27 | 6.48 | 6.96 | 7.58 |
| 2027 | 6.40 | 6.52 | 6.51 | 6.90 | 7.14 | 7.61 |
| 2028 | 6.69 | 6.75 | 6.72 | 7.03 | 7.15 | 7.63 |
| 2029 | 6.88 | 6.91 | 6.97 | 7.10 | 7.20 | 7.70 |
| 2030 | 6.89 | 6.95 | 7.02 | 7.04 | 7.25 | 7.79 |
| 2031 | 7.00 | 7.07 | 7.11 | 7.20 | 7.37 | 7.80 |
| 2032 | 6.96 | 7.27 | 7.12 | 7.29 | 7.35 | 7.87 |
| 2033 | 7.09 | 7.19 | 7.09 | 7.14 | 7.36 | 7.83 |
| 2034 | 7.11 | 7.31 | 7.12 | 7.10 | 7.32 | 7.69 |
| 2035 | 7.11 | 7.31 | 7.12 | 7.10 | 7.14 | 7.74 |
| 2036 | 7.13 | 7.31 | 7.09 | 7.19 | 7.16 | 7.70 |
| 2037 | 7.16 | 7.37 | 7.14 | 7.17 | 7.45 | 7.76 |
| 2038 | 7.06 | 7.36 | 7.11 | 7.22 | 7.67 | 7.85 |
| 2039 | 6.99 | 7.37 | 7.12 | 7.23 | 7.44 | 7.84 |
| 2040 | 7.13 | 7.44 | 7.26 | 7.19 | 7.46 | 7.76 |
| 2041 | 7.12 | 7.47 | 7.16 | 7.26 | 7.47 | 7.85 |
| 2042 | 7.17 | 7.26 | 7.15 | 7.33 | 7.74 | 7.93 |
| 2043 | 7.10 | 7.36 | 7.20 | 7.38 | 7.80 | 7.62 |
| 2044 | 7.12 | 7.38 | 7.32 | 7.38 | 7.80 | 7.78 |
| 2045 | 7.13 | 7.39 | 7.43 | 7.43 | 7.85 | 7.78 |
| 2046 | 7.11 | 7.30 | 7.40 | 7.31 | 7.73 | 7.94 |
| 2047 | | | 7.26 | 7.28 | 7.70 | 7.86 |
| 2049 | 7.12 | 7.33 | 7.36 | 7.25 | 7.67 | 7.79 |
| 2050 | 7.12 | 7.36 | 7.46 | 7.47 | 7.89 | 7.98 |
| 2051 | 7.28 | 7.42 | 7.45 | 7.29 | 7.71 | 8.17 |
| 2052 | | | 7.30 | 7.13 | 7.55 | 8.12 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2054 | 7.25 | 7.53 | 7.32 | 7.20 | 7.58 | 8.12 |
| 2055 | 7.23 | 7.50 | 7.39 | 7.27 | 7.58 | 8.12 |
| 2056 | 7.21 | 7.46 | 7.46 | 7.19 | 7.61 | 8.08 |
| 2059 | 7.21 | 7.46 | 7.46 | 7.22 | 7.66 | 8.13 |
| 2060 | 7.21 | 7.46 | 7.46 | 7.25 | 7.72 | 8.18 |

1* : First Six Months
2**: Second Six Months

**Spreads between 10 Year Gsec and 10 Year SDL YTM in May 2022**




**#10 Year SDL yield:** Average YTM of 10 Year SDL securities.

**Base Rates of Alternative Reference Rates(ARRs) For FCNR(B) Deposits**

| ARR | 31-Jan-22 | 28-Feb-22 | 31-Mar-22 | 29-Apr-22 | 31-May-22 |
|---|---|---|---|---|---|
| SOFR(USD) | 0.05 | 0.05 | 0.28 | 0.28 | 0.78 |
| SONIA(GBP) | 0.1989 | 0.4451 | 0.6907 | 0.6902 | 0.9383 |
| €STR(EUR) | -0.579 | -0.576 | -0.579 | -0.583 | -0.585 |
| TONA(JPY) | -0.021 | -0.017 | -0.004 | -0.018 | -0.021 |
| CORRA(CAD) | 0.1300 | 0.1900 | 0.4500 | 0.9200 | 0.9600 |
| AONIA(AUD) | 0.10 | 0.10 | 0.10 | 0.10 | 0.35 |
| SARON(CHF) | -0.696923 | -0.718465 | -0.700303 | -0.707814 | -0.709455 |
| OCR(NZD) | 0.75 | 1.00 | 1.00 | 1.50 | 2.00 |
| SWESTR(SEK) | -0.121 | -0.093 | -0.107 | -0.106 | 0.146 |
| SORA(SGD) | 0.3513 | 0.2791 | 0.5117 | 0.4155 | 0.7681 |
| HONIA(HKD) | 0.10355 | 0.03075 | 0.02437 | 0.01731 | 0.02054 |
| MYOR(MYR) | 1.75 | 1.75 | 1.75 | 1.75 | 1.98 |

# Monthly Benchmark Monitor

## Mumbai Inter-bank Outright Rate (MIBOR)

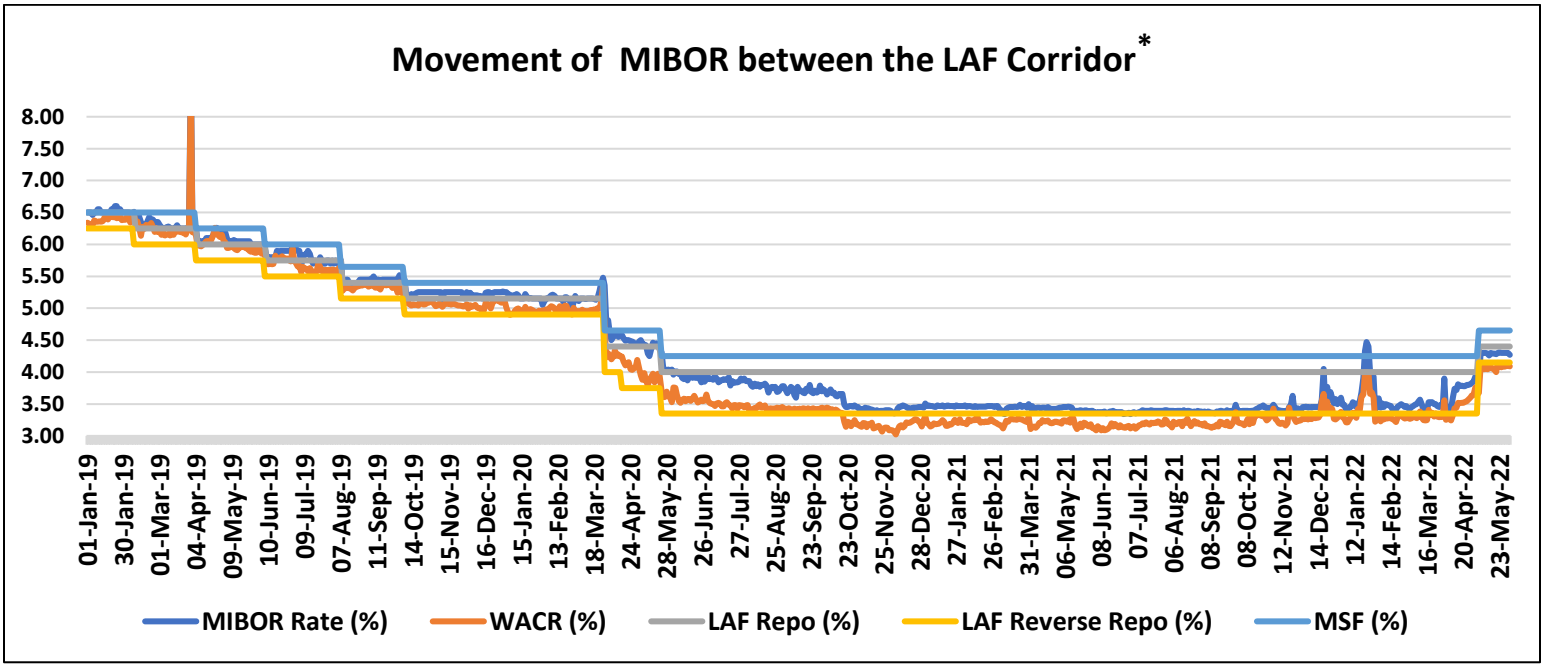
FBIL comenced publication of MIBOR effective from July 22, 2015 taking over from the National Stock Exchange (NSE). MIBOR is calculated based on transactions data on the NDS-Call platform of CCIL. Currently CCIL is the calculating agent of MIBOR. FBIL publishes MIBOR on each trading day at 10:45 AM.

**Benchmark Calculation Process:**

- It is the volume weighted average rate calculated from the overnight trades transacted on the NDS-CALL platform in the first hour of trading.
- Only INR 5 crores and above deals are accepted for computation.
- Threshold: Minimum 10 trades and INR 500 crores.
- Outliers are detected using +/- 3SD criteria and dropped from the MIBOR calculation.
- Non-availability of data triggers a fallback procedure.
- In case, it is not possible to calculate rate using fallback mechanism, then previous working day's MIBOR is published for the day. Since the inception of publication of MIBOR,only on one occasion, the previous day's rate was repeated.

**Significance of MIBOR:**

- Overnight clean borrowing rate based on transactions level data.
- MIBOR is a market liquidity indicator.
- MIBOR can be used for valuation, pricing, interest rate fixing of loan products etc.
- MIBOR is also used as the floating rate for derivative product (MIBOR OIS).



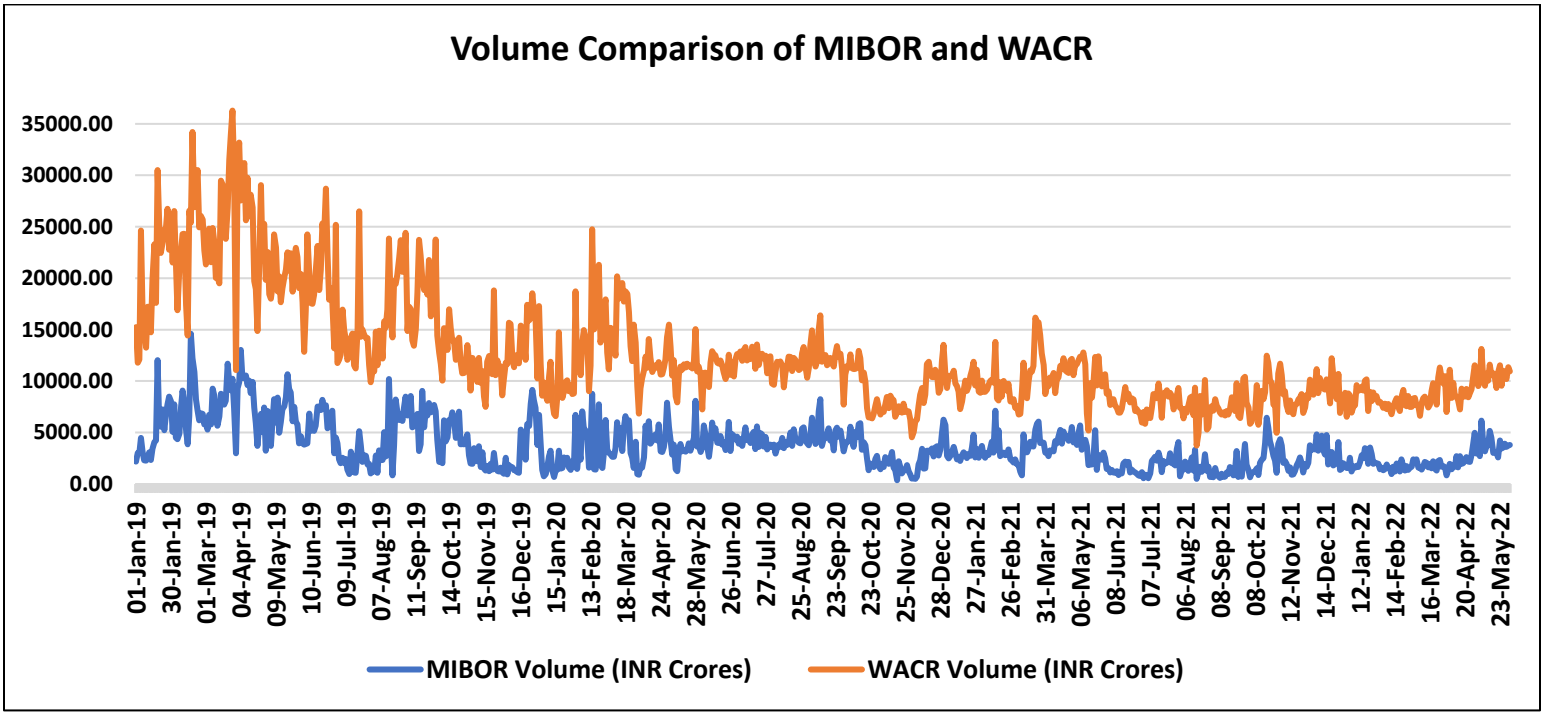

Source: FBIL and CCIL

* From May 04, 2022, Reverse Repo has been replaced by Standing Deposit Facility (SDF) as the Floor of LAF corridor.

*WACR: Weighted Average Call Rate is the volume weighted average of entire day's call money transactions obtained from the NDS-CALL platform of Clearing Corporation of India Ltd (CCIL).*

**Observation of the review period ( January 01, 2019 to May 31, 2022):**

- During the review period, MIBOR traversed between the LAF corridor with a downward bias from October 2020 to December 2021.
- On March 29, 2019 the MIBOR witnessed a sharp spike to 8.80 because of year-end phenomenon.
- The MIBOR is generally higher than the WACR, primarily because of,
    - MIBOR is computed based on first hour data when the demand for funds is higher.
    - Reported deals and constituent trades are not taken into account for MIBOR computation. Those deals are generally executed at rates lower than the interbank trades.
- MIBOR volume decreased substantially in later half of 2021 in tandem with the decline in the volume of WACR but has picked up in the recent months.




**Descriptive Statistics of MIBOR and WACR for the review period**

| | MIBOR | WACR |
|---|---|---|
| **Mean** | 4.38 | 4.17 |
| **Standard Error** | 0.04 | 0.04 |
| **Median** | 3.84 | 3.49 |
| **Mode** | 3.39 | 5.87 |
| **Standard Deviation** | 1.08 | 1.12 |
| **Sample Variance** | 1.16 | 1.26 |
| **Kurtosis** | -0.86 | -0.88 |
| **Skewness** | 0.70 | 0.75 |
| **Range** | 5.46 | 5.47 |
| **Minimum** | 3.34 | 3.02 |
| **Maximum** | 8.80 | 8.49 |
| **Count** | 826 | 826 |
| **Confidence Level(95.0%)** | 0.07 | 0.08 |

In the context of the LIBOR transition, many benchmark administrators have statrted publishing Inter Bank Offered rates(IBORs) based on the entire days transactions level data. They have been also publishing compounded IBORs for various tenors. FBIL is actively engaged with the market participants for developing compounded MIBOR for various tenors .

**Explanatory Note:**

- Vol: Average volumes in a month in ₹Crores – all benchmarks except Forward Premia and USD/INR which are in $Mio.
- Tr: Average no. of trades in a month in round figures.
- Data published in the various tables are the final output after removal of outliers used for calculation of the benchmark rates.
- MIBOR & MROR: The data on number of trades and volumes are based on the first hour trades from 9.00 hrs to 10.00 hrs on a trading day obtained from the NDS-CALL and CROMS platforms respectively.
- Reference Rate: The data on number of trades and volumes in USD/INR are based on a random 15-min window between 11:30 and 12:30 hrs. obtained from FX Clear and Refinitiv. The quotes for Cross Currency pairs of GBP/INR, EUR/INR and 100 JPY/INR are indicative quotes in the same time window obtained from Refinitiv.
- Forward Premia curve: The data on number of trades and volumes are based on the USD/INR transactions data reported upto 3 PM on the CCIL platform.
- T-bill Rate: The data on number of trades and volumes are based on the transaction captured from NDS-OM platform upto 5 PM. (Currently upto 3:30 pm from Nov 9, 2020 onwards)
- CD rate: The data on number of trades and volumes based on the transactions upto 5 PM reported on the FTRAC of CCIL. (Currently upto 3:30 pm from Nov 9, 2020 onwards)
- MIBOR-OIS: The data on number of trades and volumes are based on the MIBOR-OIS transactions data reported to the CCIL upto 5 PM. (Currently upto 3:30 pm from Nov 9, 2020 onwards)
- FBIL Modified MIFOR: The Modified MIFOR has two components; i) the rolling forward premia for a specific tenor and the SOFR compounded in arrears using the Rate Record Date concept. The rates for various tenors are published on the Calculation Date for the corresponding Rate Record Dates. There may be multiple rates (based on multiple Rate Record Dates) on a particular Calculation Date .
- 10 Year G-Sec Yield (Average YTM): The G-Sec Valuation requires nodal points as data input for generating a yield curve. For the 10-year G-Sec Yield, two nodal point securities have been taken in the last twelve month period. The 10 Year Gsecs were 5.85% GS 2030 from November 27, 2020 to July 8, 2021, 6.10% GS 2031 from July 9, 2021 to Jan 13, 2022 and 6.54% GS 2032 from Jan 14, 2022 onwards.
- Top five securities have been chosen as per the total traded volumes on NDS OM platform in a month. Average trades and volumes are derived by taking simple average of total trades and volumes respectively.
- G-Sec Par Yield: Par Yield on semi annual basis has been taken from daily par-yield curve from the FBIL website.
- Average YTM: SDL Average YTM is the simple average of YTMs of all the outstanding SDLs in a particular tenor published in the SDL

**Disclaimer:**
While FBIL has taken every care to ensure that the information provided in the Newsletter are accurate and complete, FBIL does not warrant and make any representation as to the accuracy and completeness of the same. Accordingly, FBIL assumes no responsibility for any error and omission in any part of the document. In no event, shall FBIL be liable for any loss, cost or damage arising out of the use of this document.