December 3, 2025

# Daily Derivatives Report

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# Futures and Volatility

## Nifty Futures

| | Value | Change |
|---|---|---|
| Most recent settlement | 26,213 | 0.5% ▼ |
| Open Interest (OI) | 1,57,90,000 | 4.0% ▲ |
| Change in OI (abs) | 1,57,90,000 | 6,04,475 ▲ |
| Premium / Discount (Abs) | 181 | 22 ▲ |
| **Inference** | Short Build Up | |

## Bank Nifty Futures

| | Value | Change |
|---|---|---|
| Most recent settlement | 59,665 | 0.4% ▼ |
| Open interest (OI) | 16,69,625 | 1.3% ▼ |
| Change in OI (abs) | 16,69,625 | 22,110 ▼ |
| Premium / Discount (Abs) | 392 | 159 ▲ |
| **Inference** | Long Unwinding | |

## Volatility Insights

| | Value | Change |
|---|---|---|
| India VIX Index | 11.2 | 0.4 ▼ |
| Nifty ATM IV (%) | 9.72 | 1.2 ▼ |
| Bank Nifty ATM IV (%) | 10.55 | 0.1 ▲ |
| PCR (Nifty) | 0.94 | 0.18 ▼ |
| PCR (Bank Nifty) | 1.03 | 0.10 ▼ |

**The FII Long Ratio in Index Futures decreased to 15.9% from 19% .**

## Single Stock Futures Movers

**Long Buildup (Open Interest Higher + Price Higher)**

| Symbol | Open Interest | Chg (%) | Price | Chg (%) |
|---|---|---|---|---|
| POWERINDIA | 2,16,600 | 14.9% | 22755 | 2.4% |
| SHREECEM | 2,95,925 | 7.9% | 26720 | 0.5% |
| ANGELONE | 31,30,750 | 7.5% | 2753 | 0.4% |
| POLICYBZR | 78,52,600 | 5.2% | 1876.9 | 0.0% |
| ASIANPAINT | 1,12,17,500 | 3.7% | 2,967.50 | 3.1% |

**Short Buildup (Open Interest Higher + Price Lower)**

| Symbol | Open Interest | Chg (%) | Price | Chg (%) |
|---|---|---|---|---|
| CAMS | 19,68,000 | 6.8% | 3865.8 | -1.7% |
| BDL | 50,26,150 | 5.6% | 1532.5 | -0.1% |
| INDIANB | 1,20,13,000 | 5.5% | 861.85 | -3.0% |
| HDFCAMC | 47,81,700 | 5.3% | 2614.7 | -1.7% |
| KPITTECH | 34,17,225 | 5.3% | 1261.4 | -0.4% |

**Short Covering (Open Interest Lower + Price Higher)**

| Symbol | Open Interest | Chg (%) | Price | Chg (%) |
|---|---|---|---|---|
| BANKBARODA | 8,99,43,750 | -5.1% | 297.95 | 0.3% |
| CYIENT | 37,17,475 | -4.1% | 1183.7 | 1.1% |
| BOSCHLTD | 2,16,400 | -3.7% | 36805 | 0.6% |
| NATIONALUM | 6,99,56,250 | -3.4% | 266.1 | 0.2% |
| CANBK | 13,02,61,500 | -3.4% | 152.34 | 0.8% |

**Long Unwinding (Open Interest Lower + Price Lower)**

| Symbol | Open Interest | Chg (%) | Price | Chg (%) |
|---|---|---|---|---|
| MUTHOOTFIN | 25,88,850 | -3.3% | 3789.2 | -0.8% |
| SONACOMS | 1,34,54,875 | -3.0% | 508.5 | -0.6% |
| IIFL | 1,22,80,950 | -2.9% | 583.6 | -1.2% |
| PIIND | 23,16,650 | -2.7% | 3395.8 | -0.3% |
| NUVAMA | 3,73,325 | -2.7% | 7303 | -2.5% |

*For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix*

## Open Interest Trends by Participant

▲ and ▼ indicate positive and negative absolute changes, respectively

### FII

| | INDEX CALL | INDEX FUT | INDEX PUT | STK FUT |
|---|---|---|---|---|
| Change | -5,607 ▼ | -13,115 ▼ | -14,022 ▼ | 58,948 ▲ |
| Today | -13,943 | -12,689 | 135 | 51,943 |
| Prev Day | -8,336 | 426 | 14,157 | -7,005 |
| Net O/S | -26,530 | -99,859 | 265,296 | 1,371,746 |

### DII

| | INDEX CALL | INDEX FUT | INDEX PUT | STK FUT |
|---|---|---|---|---|
| Change | 1,000 ▲ | -6,007 ▼ | 0 | -122,412 ▼ |
| Today | 1,000 | -7,119 | 0 | -74,379 |
| Prev Day | 0 | -1,112 | 0 | 48,033 |
| Net O/S | 2,950 | 34,831 | 27,294 | -4,503,760 |

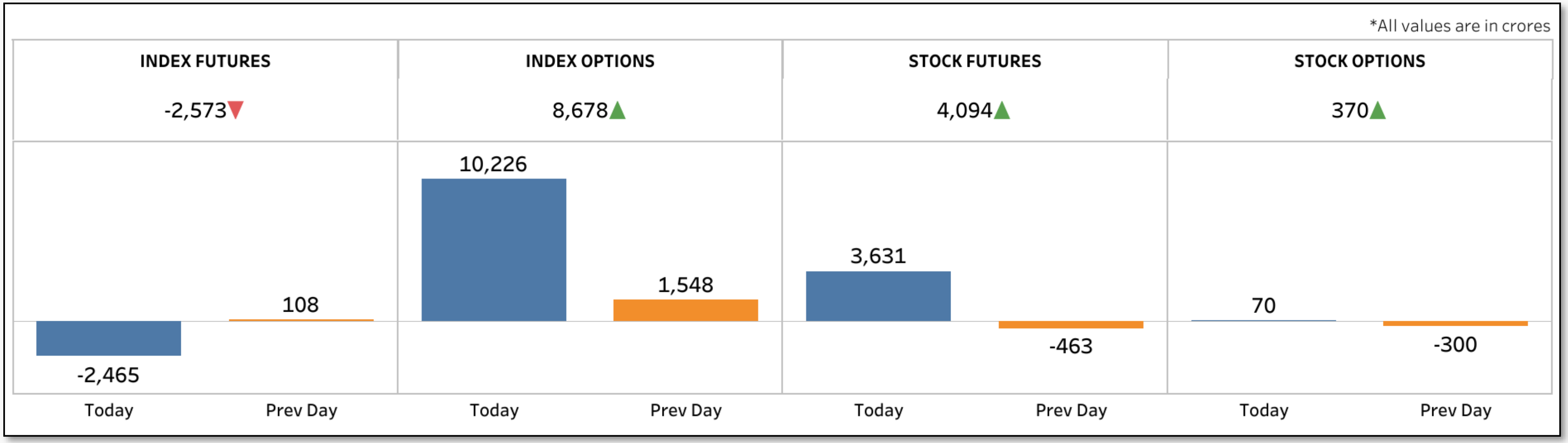
### Clients

| | INDEX CALL | INDEX FUT | INDEX PUT | STK FUT |
|---|---|---|---|---|
| Change | -131,819 ▼ | 15,011 ▲ | 75,013 ▲ | -9,549 ▼ |
| Today | -21,635 | 17,352 | -24,298 | -17,803 |
| Prev Day | 110,184 | 2,341 | -99,311 | -8,254 |
| Net O/S | 17,890 | 75,400 | -456,076 | 2,666,893 |

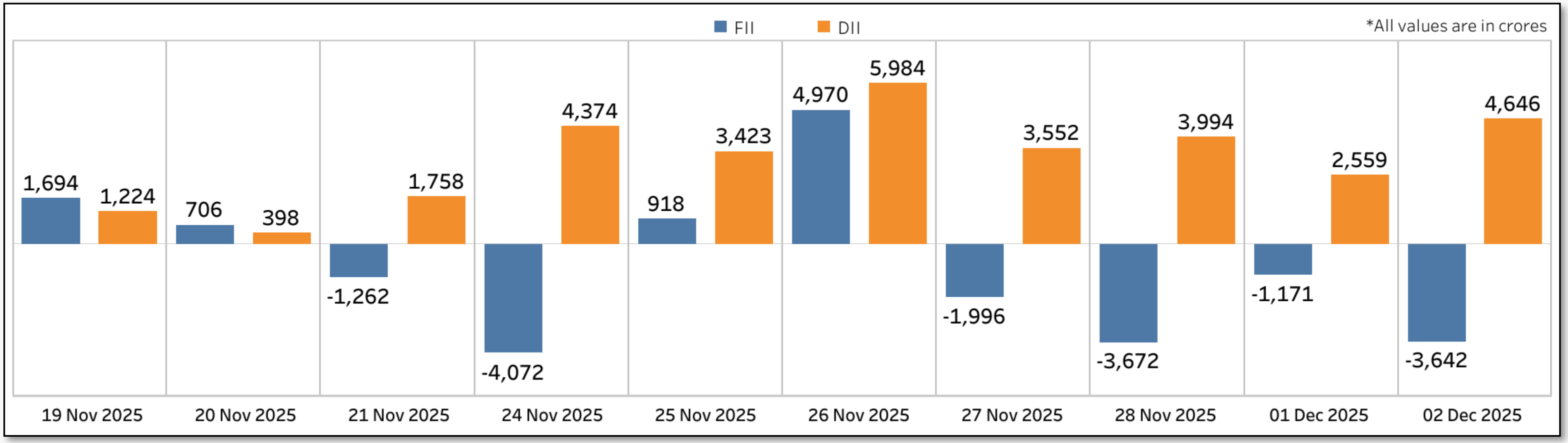
### Pro

| | INDEX CALL | INDEX FUT | INDEX PUT | STK FUT |
|---|---|---|---|---|
| Change | 136,424 ▲ | 4,111 ▲ | -60,990 ▼ | 73,013 ▲ |
| Today | 34,577 | 2,456 | 24,164 | 40,239 |
| Prev Day | -101,847 | -1,655 | 85,154 | -32,774 |
| Net O/S | 5,691 | -10,372 | 163,486 | 465,121 |

## Daily Net Open Interest Change

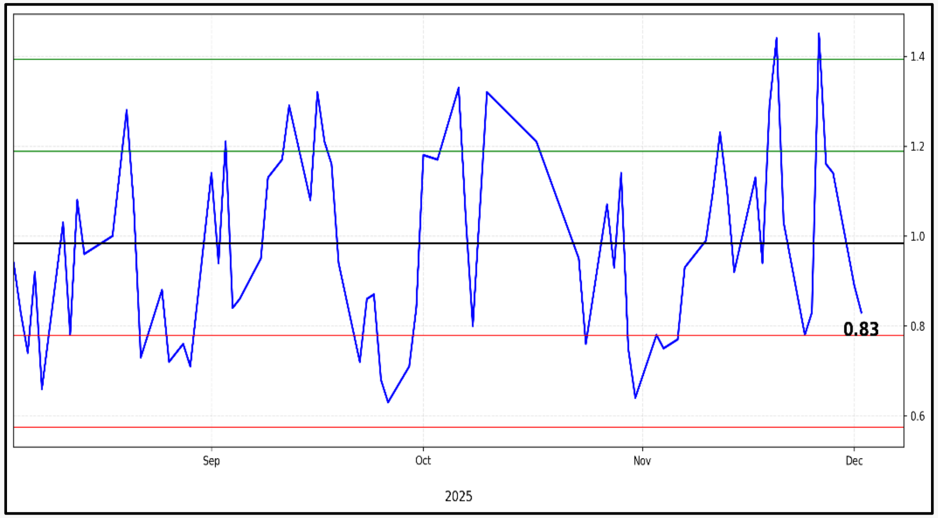



## DII and FII Daily Cash Market Flows



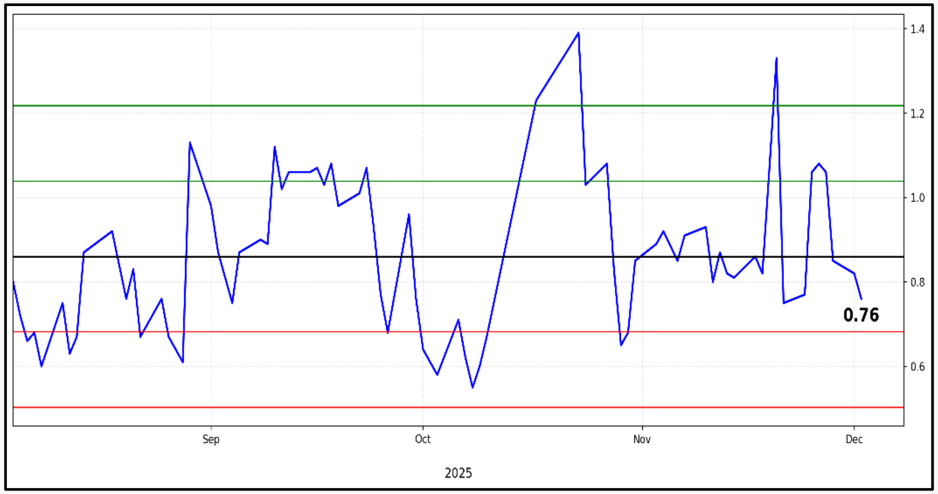
# Put Call Ratio (PCR)

## Nifty

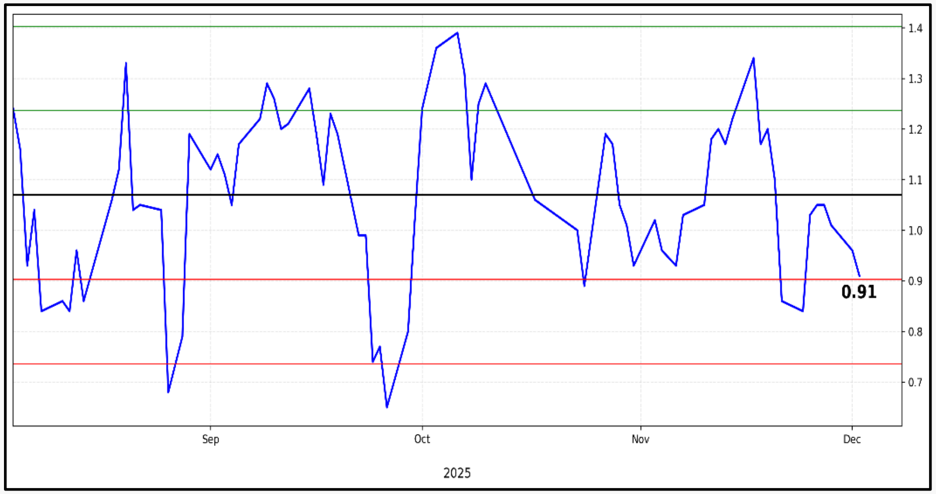



## Bank Nifty


## Fin Nifty




## Midcap Select Nifty

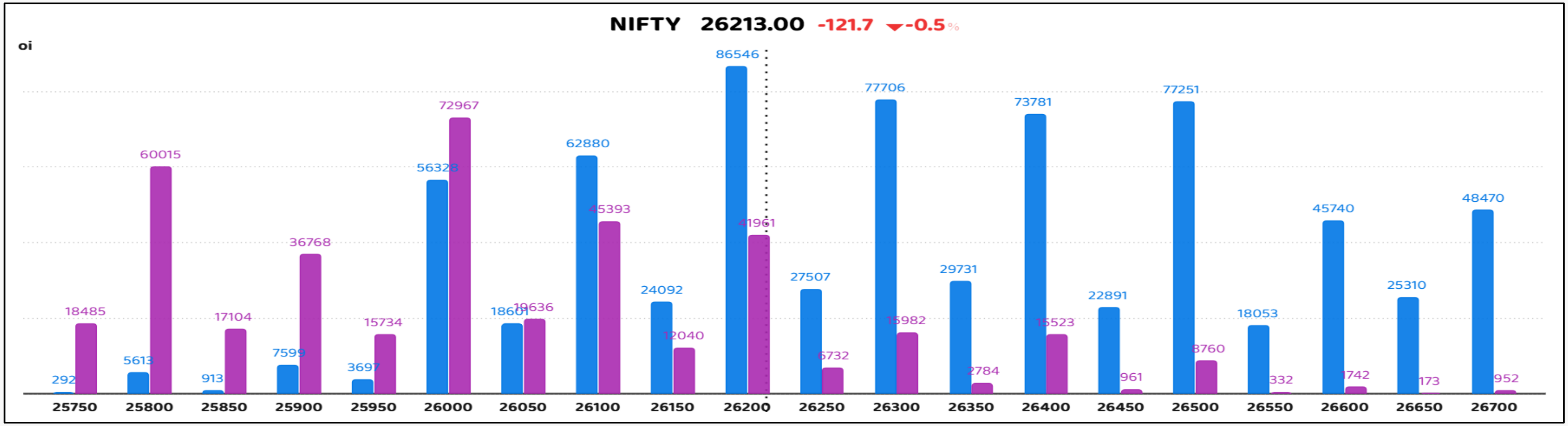



*On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation*

# Options Strike Concentration

## Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call Put




*For Nifty, the 26,200 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,000 Put saw the most amount of open interest.*

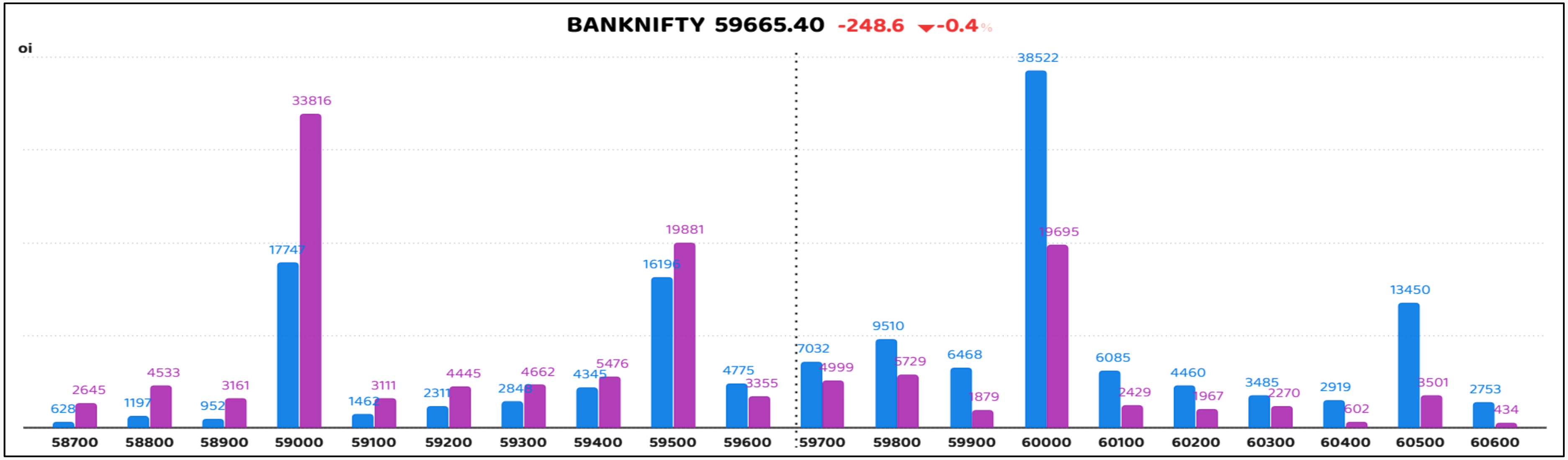
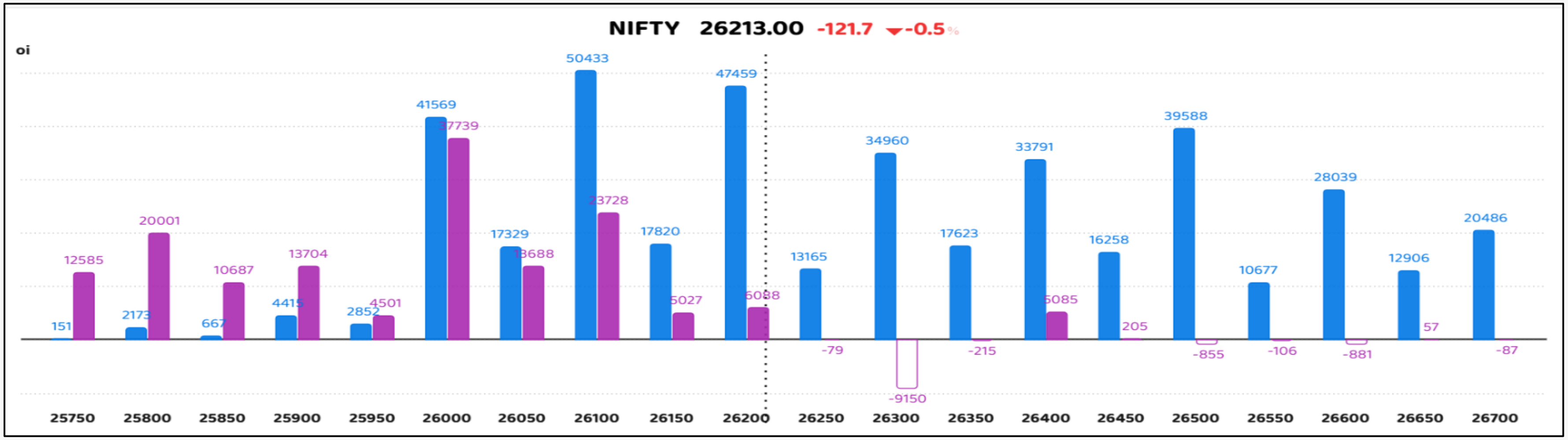


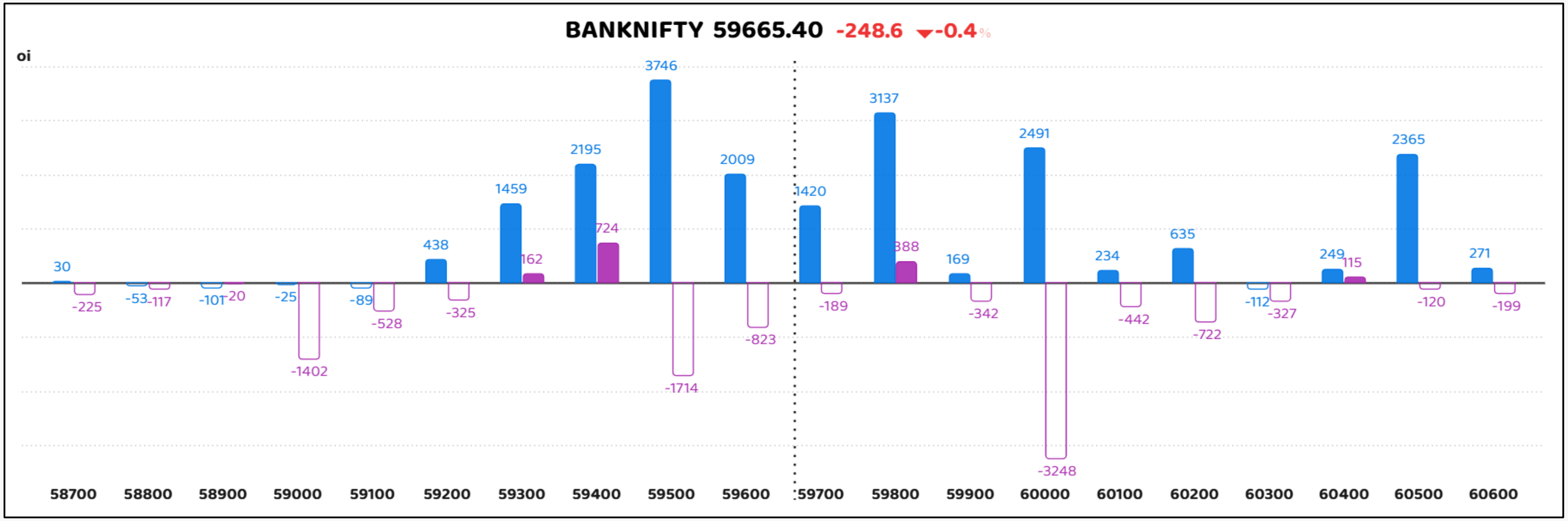

*Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session*

## Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call Put




*The largest open interest changes (contracts) were seen at the 26,100 Call and the 26,000 Put*




*For the Bank Nifty, the biggest open interest changes were seen at the 59,500 Call & the 60,000 Put*

# Implied Volatility Rank (IVR)

## Stocks with High IVR:

| Ticker | Last Px | Chg (%) | 30d IV | 30d IV High | 30d IV Low | IVR (1m/1y) |
|---|---|---|---|---|---|---|
| HDFC BANK LTD | 989.8 | -1.2 | 17.2 | 28.0 | 1.5 | 59.5 |
| BANDHAN BANK LTD | 149.8 | -0.2 | 41.7 | 66.9 | 15.9 | 50.7 |
| BOSCH LTD | 36,660.0 | 0.9 | 19.4 | 36.2 | 2.1 | 50.7 |
| CANARA BANK | 152.0 | 1.0 | 25.7 | 44.7 | 6.6 | 50.0 |
| BHARAT HEAVY ELE | 285.5 | -1.9 | 29.5 | 54.7 | 5.2 | 49.2 |

## Stocks with Low IVR:

| Ticker | Last Px | Chg (%) | 30d IV | 30d IV High | 30d IV Low | IVR (1m/1y) |
|---|---|---|---|---|---|---|
| HINDUSTAN UNILEV | 2,477.8 | 0.5 | 6.6 | 25.8 | 6.6 | 0.0 |
| TECH MAHINDRA LT | 1,536.7 | 0.5 | 13.0 | 44.2 | 13.0 | 0.0 |
| SAMVARDHANA MOTH | 119.3 | 2.3 | 27.3 | 59.6 | 27.3 | 0.0 |
| TATA CONSUMER PR | 1,162.2 | -0.1 | 5.2 | 34.4 | 5.2 | 0.0 |
| STEEL AUTHORITY | 132.5 | -1.9 | 0.6 | 91.3 | 0.6 | 0.0 |

*IV is 30-day IV. Readings show how high or low the current IV is relative to its range over the past 12 months. If IVR is close to 100 (0), it means volatility is high (low)*

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# Implied Volatility Percentile (IVP)

## Stocks With High IVP:

| Ticker | Last Px | Chg (%) | 30d IV | 30d IV High | 30d IV Low | IVP (1m/1y) |
|---|---|---|---|---|---|---|
| BANDHAN BANK LTD | 149.8 | -0.2 | 41.7 | 66.9 | 15.9 | 90.2 |
| INDRAPRASTHA GAS | 198.4 | -0.3 | 39.8 | 63.7 | 22.3 | 81.1 |
| MANAPPURAM FINAN | 278.0 | -1.6 | 29.3 | 64.2 | 5.0 | 48.4 |
| ASHOK LEYLAND | 160.0 | -0.2 | 27.1 | 56.0 | 22.0 | 46.1 |
| HDFC BANK LTD | 989.8 | -1.2 | 17.2 | 28.0 | 1.5 | 44.7 |

## Stocks With Low IVP:

| Ticker | Last Px | Chg (%) | 30d IV | 30d IV High | 30d IV Low | IVP (1m/1y) |
|---|---|---|---|---|---|---|
| HINDUSTAN UNILEV | 2,477.8 | 0.5 | 6.6 | 25.8 | 6.6 | 0.0 |
| TECH MAHINDRA LT | 1,536.7 | 0.5 | 13.0 | 44.2 | 13.0 | 0.0 |
| TATA CONSUMER PR | 1,162.2 | -0.1 | 5.2 | 34.4 | 5.2 | 0.0 |
| SAMVARDHANA MOTH | 119.3 | 2.3 | 27.3 | 59.6 | 27.3 | 0.0 |
| STEEL AUTHORITY | 132.5 | -1.9 | 0.6 | 91.3 | 0.6 | 0.0 |

*IV is 30-day IV. IVP readings show on how many days – over the last 12 months - the IV has been below the current IV. Higher (lower) the number, the more expensive (cheap) the IV*

# Elevated Call and Put Activity

## Stocks With High Call Volume To Put Volume

| Ticker | Last Px | Chg (%) | Total Call Vol | Total Put Vol | Call to Put Vol |
|---|---|---|---|---|---|
| YESBANK | 22.7 | 1.2 | 11,644 | 2,457 | 4.7 |
| RVNL | 317.9 | -1.2 | 4,968 | 1,079 | 4.6 |
| NAUKRI | 1,386.6 | 1.6 | 40,892 | 9,294 | 4.4 |
| IDEA | 10.1 | 2.0 | 22,263 | 5,294 | 4.2 |
| BDL | 1,525.3 | -0.3 | 26,982 | 6,476 | 4.2 |

## Stocks With High Put Volume To Call Volume

| Ticker | Last Px | Chg (%) | Total Call Vol | Total Put Vol | Put to Call Vol |
|---|---|---|---|---|---|
| DIVISLAB | 6,417.5 | -0.1 | 4,863 | 6,483 | 1.3 |
| MFSL | 1,691.8 | -1.3 | 6,544 | 8,253 | 1.3 |
| ICICIGI | 1,986.7 | -0.2 | 2,441 | 2,726 | 1.1 |
| PNBHOUSING | 899.4 | -1.0 | 1,679 | 1,531 | 0.9 |
| KOTAKBANK | 2,142.4 | -0.2 | 20,122 | 16,770 | 0.8 |

*Call and put volume refers to the number of contracts that have been traded in the most recently concluded session*
*Only looks at stocks with volumes more than 1000 contracts*

# Open Interest Relative to History

## Call Open Interest Relative to Record High

| Ticker | Last Px | Chg (%) | Total Call OI | Highest Call OI | Relative to Highest Call OI |
|---|---|---|---|---|---|
| JSWSTEEL | 1,162.0 | -0.5 | 19,286 | 21,784 | 88.5 |
| HINDUNILVR | 2,477.8 | 0.5 | 37,280 | 45,551 | 81.8 |
| KAYNES | 5,408.5 | 0.9 | 30,981 | 39,309 | 78.8 |
| GAIL | 175.0 | -0.2 | 18,043 | 26,194 | 68.9 |
| MFSL | 1,691.8 | -1.3 | 3,768 | 5,506 | 68.4 |

## Put Open Interest Relative to Record High

| Ticker | Last Px | Chg (%) | Total Put OI | Highest Put OI | Relative to Highest Put OI |
|---|---|---|---|---|---|
| KAYNES | 5,408.5 | 0.9 | 13,219 | 13,306 | 99.3 |
| TMPV | 361.8 | -0.6 | 36,354 | 41,434 | 87.7 |
| TVSMOTOR | 3,670.7 | 0.2 | 10,796 | 12,844 | 84.1 |
| JSWENERGY | 484.2 | -1.6 | 8,366 | 10,025 | 83.5 |
| CONCOR | 503.4 | -0.5 | 7,427 | 9,261 | 80.2 |

*Data captures stocks whose most recent call or put outstanding is at least within 80% of the record high call or put open interest*

# Volume Relative to History

## Call Volume Relative to Record High

| Ticker | Last Px | Chg (%) | Total Call Vol | Highest CV | Relative to Highest CV |
|---|---|---|---|---|---|
| UNIONBANK | 155.8 | 1.0 | 31,256 | 47,476 | 65.8 |
| NAUKRI | 1,386.6 | 1.6 | 40,892 | 1,04,571 | 39.1 |
| BANKBARODA | 296.9 | 0.5 | 37,868 | 99,425 | 38.1 |
| ASIANPAINT | 2,954.4 | 3.0 | 1,11,890 | 3,27,413 | 34.2 |
| ASHOKLEY | 160.0 | -0.2 | 39,376 | 1,28,968 | 30.5 |

## Put Volume Relative to Record High

| Ticker | Last Px | Chg (%) | Total Put Vol | Highest PV | Relative to Highest PV |
|---|---|---|---|---|---|
| UNIONBANK | 155.8 | 1.0 | 11,217 | 22,700 | 49.4 |
| INDIANB | 859.4 | -3.1 | 5,154 | 13,433 | 38.4 |
| ASHOKLEY | 160.0 | -0.2 | 16,367 | 57,453 | 28.5 |
| BANKBARODA | 296.9 | 0.5 | 25,281 | 93,110 | 27.2 |
| MFSL | 1,691.8 | -1.3 | 8,253 | 34,360 | 24.0 |

*Data captures stocks whose most recent call or put activity is at least within 80% of the record high call or put volume*
*Only looks at stocks with volumes more than 1000 contracts*

# Open Interest Spurt

## Call Open Interest to 20-day Average

| Ticker | Last Px | Chg (%) | Total Call OI | Avg OI Call 20D | 20D Call OI Ratio |
|---|---|---|---|---|---|
| JSWSTEEL | 1,162.0 | -0.5 | 19,286 | 13,722 | 1.4 |
| GAIL | 175.0 | -0.2 | 18,043 | 12,923 | 1.4 |
| HDFCLIFE | 759.0 | -1.0 | 12,425 | 9,128 | 1.4 |
| KAYNES | 5,408.5 | 0.9 | 30,981 | 24,634 | 1.3 |
| LODHA | 1,119.8 | -0.7 | 6,963 | 5,846 | 1.2 |

## Put Open Interest to 20-day Average

| Ticker | Last Px | Chg (%) | Total Put OI | Avg OI Put 20D | 20D Put OI Ratio |
|---|---|---|---|---|---|
| GAIL | 175.0 | -0.2 | 13,466 | 8,525 | 1.6 |
| KAYNES | 5,408.5 | 0.9 | 13,219 | 9,314 | 1.4 |
| NAUKRI | 1,386.6 | 1.6 | 5,560 | 4,104 | 1.4 |
| ITC | 401.0 | -0.8 | 25,762 | 19,153 | 1.3 |
| JSWENERGY | 484.2 | -1.6 | 8,366 | 6,289 | 1.3 |

## Call Volume Relative to 20-day Average

| Ticker | Last Px | Chg (%) | Total Call Vol | Avg Vol Cal 20D | 20D Call Vol Ratio |
|---|---|---|---|---|---|
| NAUKRI | 1,386.6 | 1.6 | 40,892 | 11,485 | 3.6 |
| UNIONBANK | 155.8 | 1.0 | 31,256 | 9,914 | 3.2 |
| IEX | 148.5 | 1.3 | 30,419 | 15,775 | 1.9 |
| CYIENT | 1,178.8 | 1.3 | 8,209 | 4,490 | 1.8 |
| BANKBARODA | 296.9 | 0.5 | 37,868 | 21,021 | 1.8 |

## Put Volume Relative to 20-day Average

| Ticker | Last Px | Chg (%) | Total Put Vol | Avg Vol Put 20D | 20D Put Vol Ratio |
|---|---|---|---|---|---|
| UNIONBANK | 155.8 | 1.0 | 11,217 | 4,398 | 2.6 |
| BANKBARODA | 296.9 | 0.5 | 25,281 | 11,990 | 2.1 |
| IEX | 148.5 | 1.3 | 11,311 | 5,764 | 2.0 |
| NAUKRI | 1,386.6 | 1.6 | 9,294 | 4,740 | 2.0 |
| HINDUNILVR | 2,477.8 | 0.5 | 27,073 | 15,999 | 1.7 |

*Call and put volume refers to the number of contracts that have been traded in the most recently concluded session*
*Only looks at stocks with volumes more than 1000 contracts*

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# Open Interest Based Proximity

## Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

| Stock Name | CE Strike | CE OI | %Away | CMP | PE Strike | PE OI | %Away | Stock Name | CE Strike | CE OI | %Away | CMP | PE Strike | PE OI | %Away |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ADANIENT | 2300 | 2255082 | 2.7% | **2240** | 2300 | 941832 | 2.7% | JIOFIN | 310 | 7698600 | 1.7% | **305** | 300 | 6352050 | -1.6% |
| ADANIPORTS | 1600 | 1805475 | 5.4% | **1518** | 1500 | 797525 | -1.2% | JSWSTEEL | 1200 | 3660525 | 3.3% | **1162** | 1000 | 728325 | -13.9% |
| APOLLOHOSP | 7500 | 250875 | 3.6% | **7242** | 7500 | 117750 | 3.6% | KOTAKBANK | 2200 | 1014000 | 2.7% | **2142** | 2100 | 1030000 | -2.0% |
| ASIANPAINT | 3000 | 855250 | 1.5% | **2954** | 2900 | 619500 | -1.8% | LT | 4100 | 562100 | 1.7% | **4031** | 3800 | 389550 | -5.7% |
| AXISBANK | 1300 | 2670000 | 3.3% | **1258** | 1280 | 990625 | 1.7% | M&M | 3800 | 1051600 | 2.2% | **3717** | 3700 | 488600 | -0.4% |
| BAJAJ-AUTO | 10000 | 248175 | 10.1% | **9086** | 9000 | 164175 | -0.9% | MARUTI | 16500 | 227700 | 1.6% | **16239** | 15000 | 290450 | -7.6% |
| BAJAJFINSV | 2100 | 681750 | 1.7% | **2066** | 1880 | 356500 | -9.0% | MAXHEALTH | 1200 | 701925 | 7.4% | **1118** | 1160 | 470400 | 3.8% |
| BAJFINANCE | 1100 | 2154000 | 7.3% | **1026** | 1000 | 1734000 | -2.5% | NESTLEIND | 1320 | 1576000 | 4.9% | **1259** | 1180 | 323500 | -6.3% |
| BEL | 420 | 8094000 | 1.7% | **413** | 400 | 3860325 | -3.2% | NTPC | 330 | 3328500 | 0.4% | **329** | 300 | 2344500 | -8.7% |
| BHARTIARTL | 2200 | 2324175 | 4.6% | **2104** | 2100 | 1330950 | -0.2% | ONGC | 250 | 10332000 | 2.6% | **244** | 250 | 2247750 | 2.6% |
| CIPLA | 1660 | 933750 | 9.5% | **1517** | 1410 | 561750 | -7.0% | POWERGRID | 280 | 3991900 | 4.7% | **267** | 250 | 2690400 | -6.5% |
| COALINDIA | 380 | 2720250 | 0.3% | **379** | 375 | 1669950 | -1.0% | RELIANCE | 1600 | 7856000 | 3.5% | **1546** | 1500 | 2452000 | -3.0% |
| DRREDDY | 1300 | 1114375 | 1.9% | **1275** | 1140 | 381875 | -10.6% | SBILIFE | 2200 | 271500 | 11.0% | **1982** | 1900 | 427500 | -4.1% |
| EICHERMOT | 7300 | 328300 | 2.6% | **7113** | 6300 | 241325 | -11.4% | SBIN | 1000 | 7630500 | 3.4% | **967** | 980 | 3958500 | 1.3% |
| ETERNAL | 310 | 11795200 | 3.1% | **301** | 300 | 4898500 | -0.2% | SHRIRAMFIN | 880 | 2592975 | 4.3% | **843** | 800 | 1478400 | -5.1% |
| GRASIM | 2800 | 666500 | 2.4% | **2735** | 2700 | 574500 | -1.3% | SUNPHARMA | 1840 | 803600 | 2.3% | **1799** | 1800 | 252000 | 0.0% |
| HCLTECH | 1800 | 1175650 | 10.1% | **1636** | 1440 | 516600 | -12.0% | TATACONSUM | 1200 | 898700 | 3.3% | **1162** | 1070 | 392700 | -7.9% |
| HDFCBANK | 1000 | 4211900 | 1.0% | **990** | 1000 | 2742850 | 1.0% | TMPV | 175 | 26779500 | 4.3% | **168** | 170 | 13453000 | 1.3% |
| HDFCLIFE | 800 | 4010600 | 5.4% | **759** | 700 | 1093400 | -7.8% | TCS | 3200 | 1545600 | 2.1% | **3136** | 3200 | 735350 | 2.1% |
| HINDALCO | 800 | 2293200 | -0.8% | **807** | 800 | 1473500 | -0.8% | TECHM | 1600 | 802200 | 4.1% | **1537** | 1500 | 572400 | -2.4% |
| HINDUNILVR | 2600 | 2122500 | 4.9% | **2478** | 2400 | 833100 | -3.1% | TITAN | 4000 | 314300 | 2.9% | **3886** | 3600 | 356825 | -7.4% |
| ICICIBANK | 1400 | 6759200 | 2.0% | **1373** | 1400 | 3385200 | 2.0% | TMPV | 400 | 10476800 | 10.6% | **362** | 360 | 4928800 | -0.5% |
| INDIGO | 6000 | 436350 | 5.3% | **5698** | 5500 | 199050 | -3.5% | TRENT | 4400 | 607800 | 4.1% | **4227** | 4300 | 348600 | 1.7% |
| INFY | 1600 | 2825600 | 2.5% | **1561** | 1500 | 1660000 | -3.9% | ULTRACEMCO | 12000 | 134550 | 2.9% | **11666** | 10800 | 132850 | -7.4% |
| ITC | 410 | 9291200 | 2.3% | **401** | 390 | 8889600 | -2.7% | WIPRO | 260 | 6282000 | 3.9% | **250** | 250 | 3885000 | -0.1% |

*If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green*
*If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red*
*If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored*

# Must Knows

- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

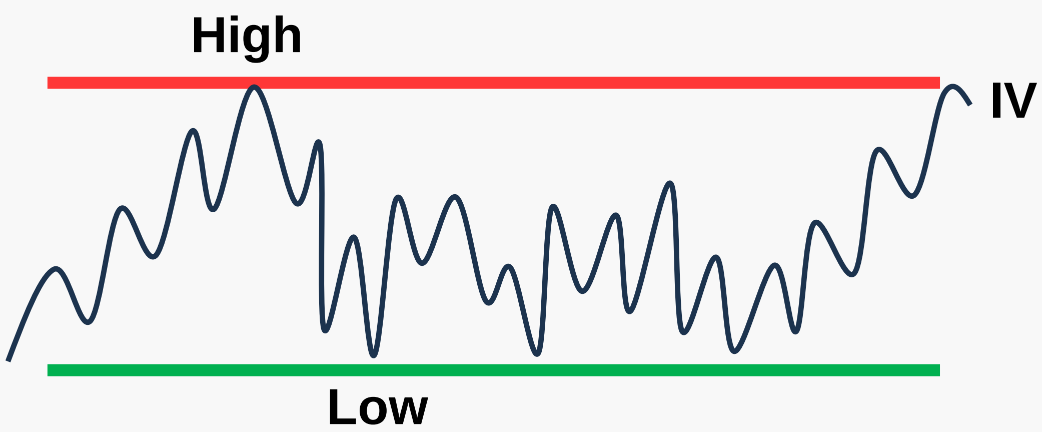
****ATM IV is the midpoint of the IV for the ATM call and put respectively***

# Appendix

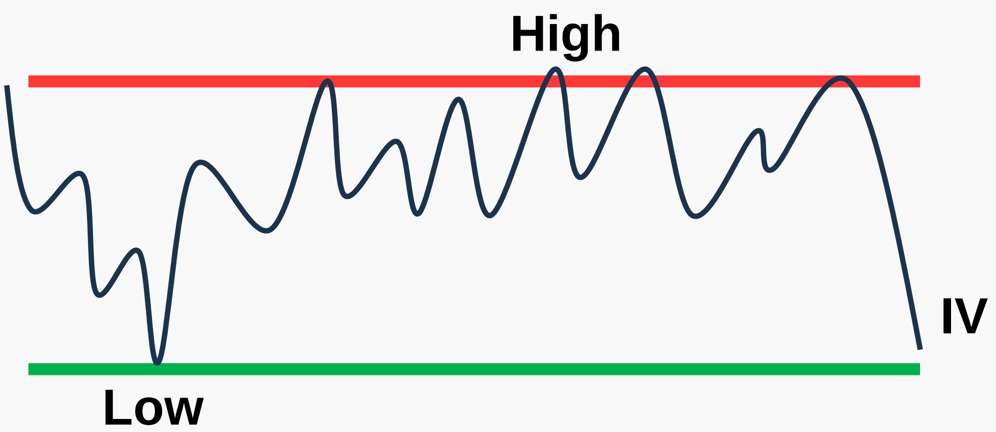
- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DIIs), proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** www.nseindia.com, Bloomberg, MyFnO

# Appendix

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR)**: Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100

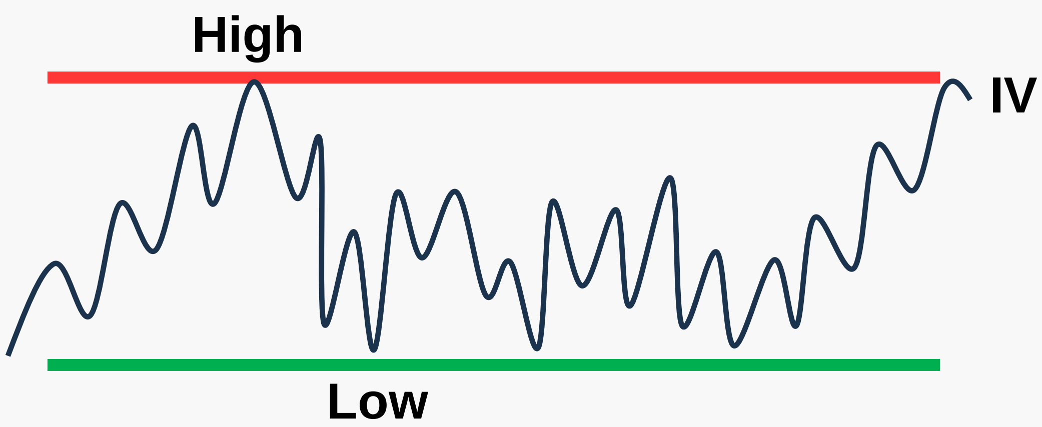



Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

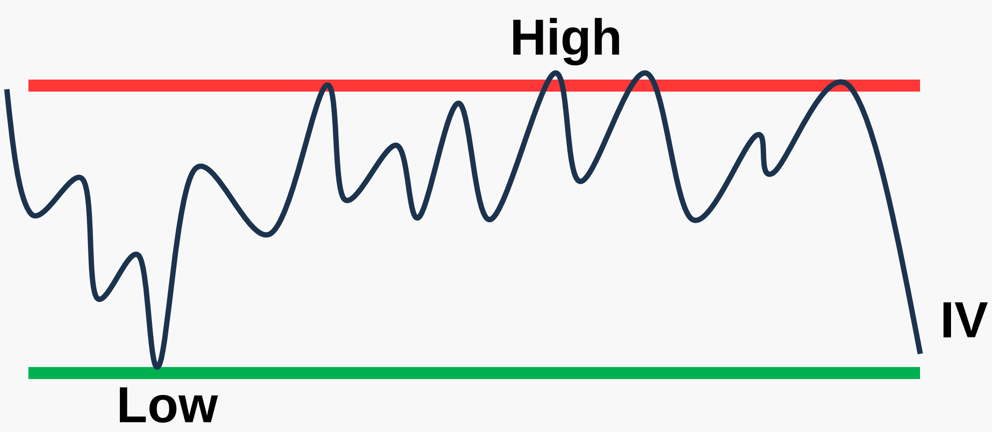



In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP)**: Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.




In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.




Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

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