



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,296	0.7%▲
Open Interest (OI)	1,53,60,605	1.7%▲
Change in OI (abs)	1,53,60,605	2,53,500▲
Premium / Discount (Abs)	167	13▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,884	0.5%▲
Open interest (OI)	13,45,440	7.9%▲
Change in OI (abs)	13,45,440	98,310▲
Premium / Discount (Abs)	415	113▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	9.47	0.21▼
Nifty ATM IV (%)	8.69	0.48▼
Bank Nifty ATM IV (%)	9.70	0.36▼
PCR (Nifty)	1.27	0.35▲
PCR (Bank Nifty)	1.13	0.07▲

The FII Long Ratio in Index Futures **drop** to 8.6 %, **down** from 8.8 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SAMMAANCAP	9,84,61,400	26.1%	146.69	3.6%
OIL	1,18,07,600	9.7%	426.6	2.8%
IOC	10,27,94,250	9.0%	167.58	3.0%
BHARATFORG	80,98,500	7.8%	1476.8	0.8%
BPCL	2,66,11,150	7.4%	386.35	3.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IRFC	6,08,77,000	6.9%	124.85	-0.5%
INDUSTOWER	8,87,60,400	4.7%	421.2	-0.9%
TCS	2,00,89,650	4.4%	3220.5	-1.1%
JUBLFOOD	2,43,08,750	4.2%	557.25	-0.5%
BAJFINANCE	9,18,06,000	4.1%	993.1	-0.3%

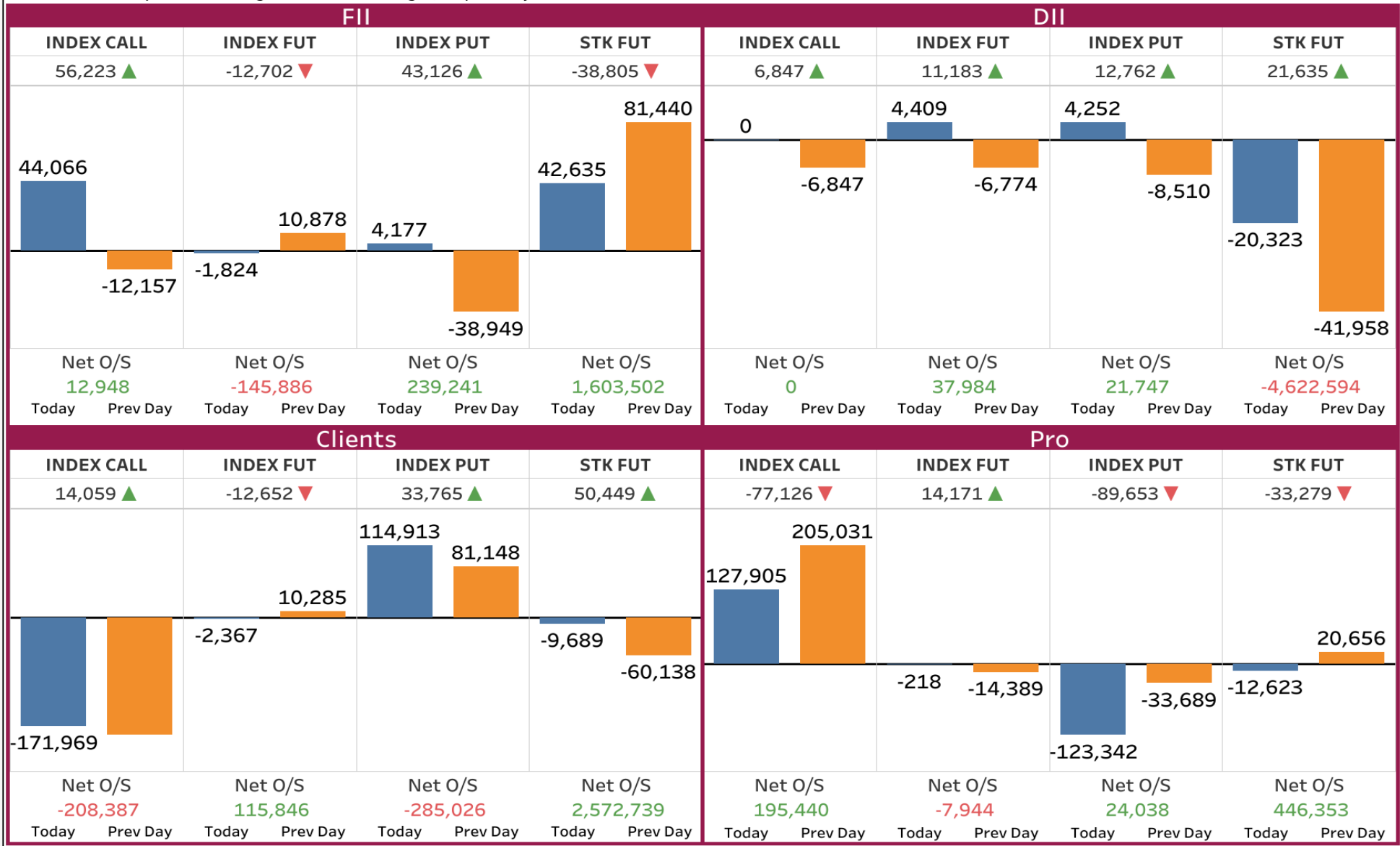
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
JINDALSTEL	1,27,16,250	-9.3%	1057.4	2.9%
KOTAKBANK	3,86,96,400	-6.3%	2209.2	1.9%
RBLBANK	7,18,82,000	-4.6%	316.9	1.9%
NUVAMA	23,79,000	-4.3%	1486.5	1.8%
SHREECEM	2,80,525	-2.9%	26655	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NMDC	34,00,04,250	-1.8%	83.5	-0.6%
NATIONALUM	5,26,08,750	-1.6%	316.15	-0.1%
NBCC	9,56,54,000	-0.7%	122.25	-0.6%
VEDL	9,21,04,650	-0.6%	605.9	-0.6%
AUROPARMA	2,17,65,700	-0.5%	1189.5	-0.5%

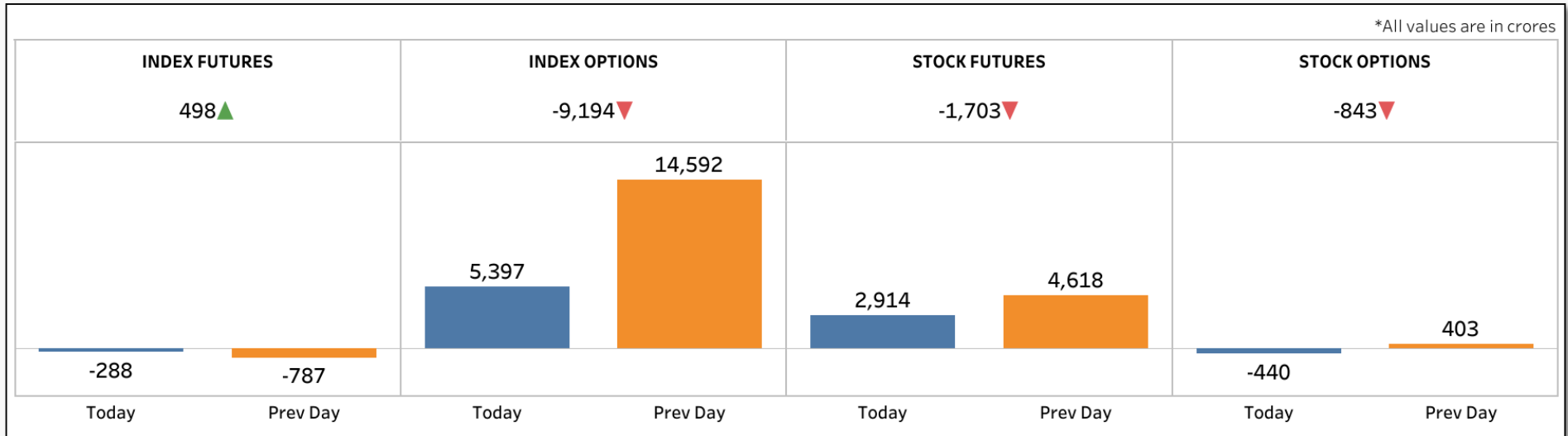
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

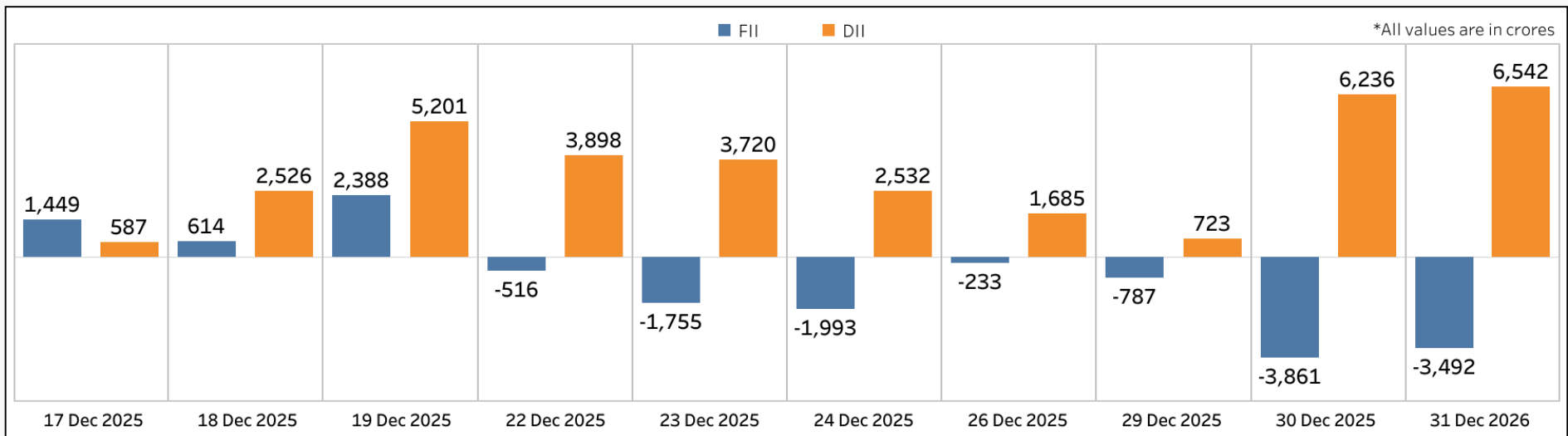
▲ and ▼ indicate positive and negative absolute changes, respectively



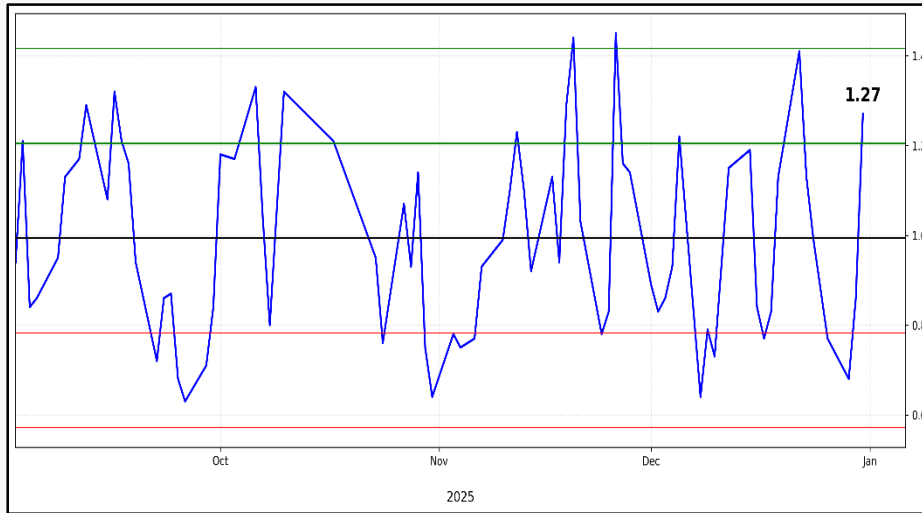
Daily Net Open Interest Change



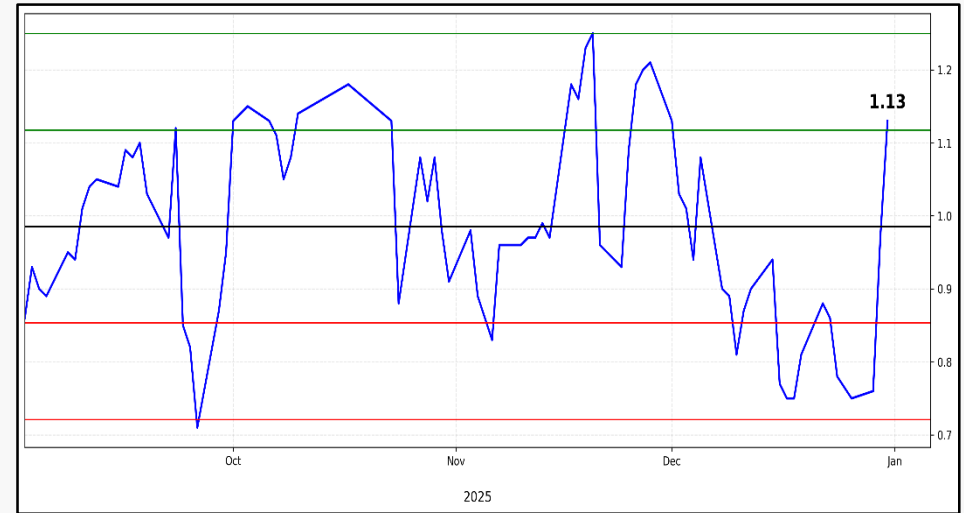
DII and FII Daily Cash Market Flows



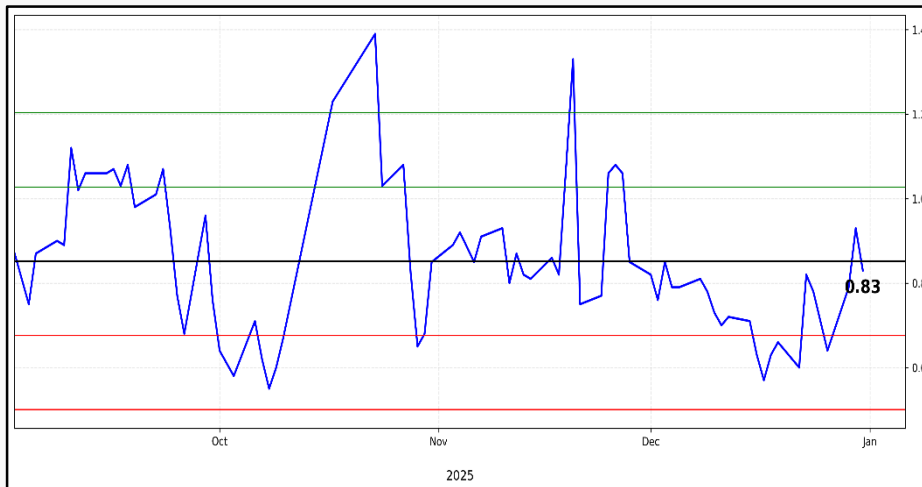
Nifty



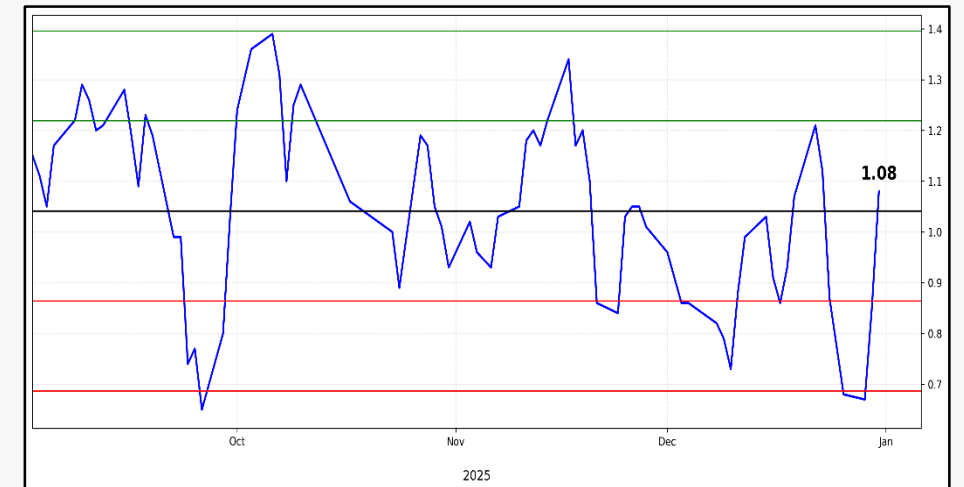
Bank Nifty



Fin Nifty

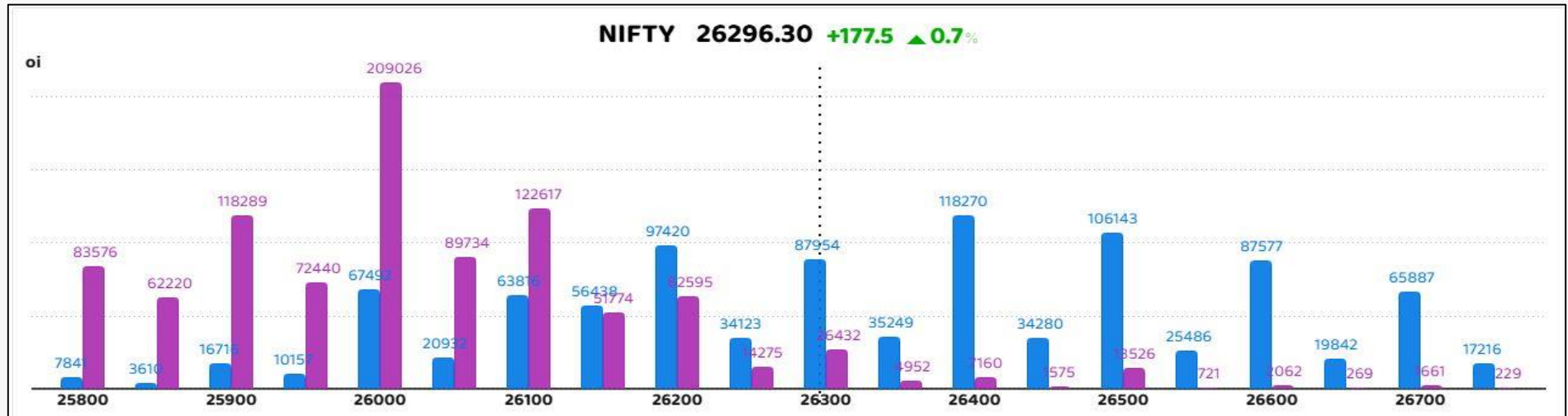


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,400 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 59,500 Call and the 59,500 Put saw the most amount of open interest.

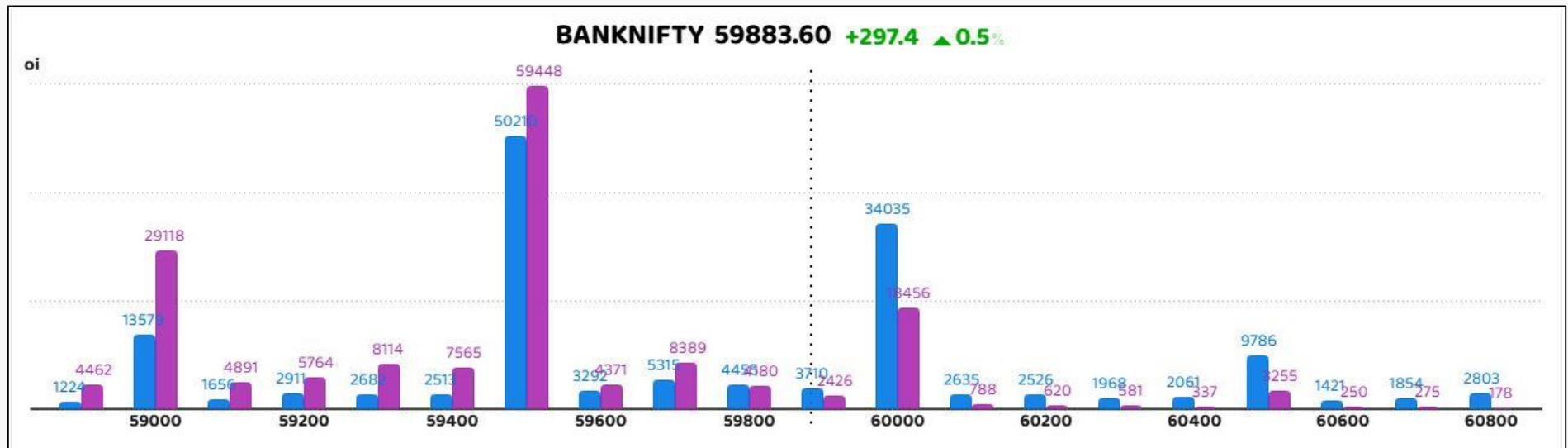
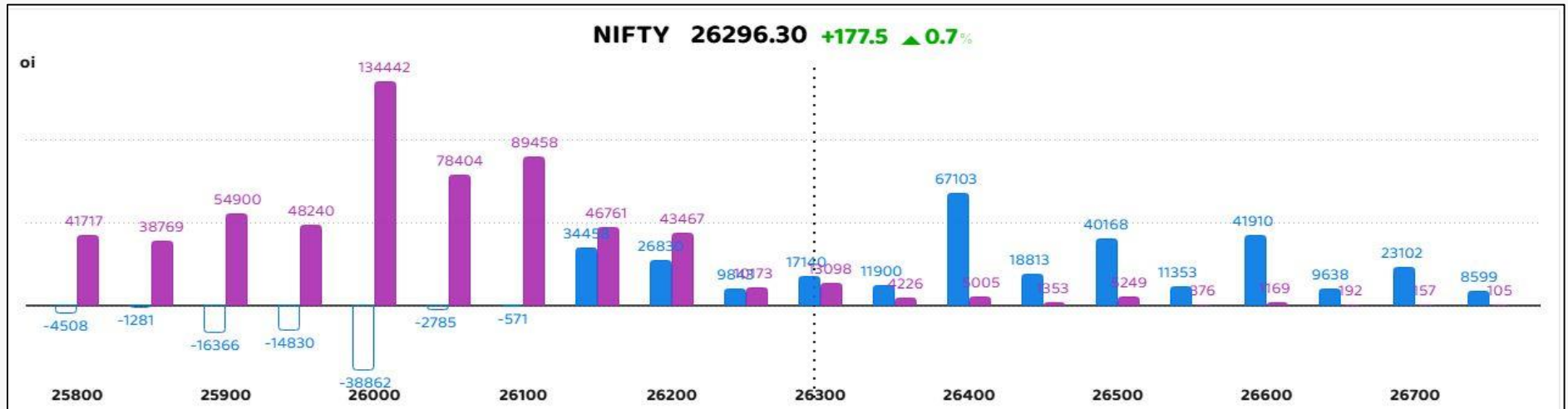


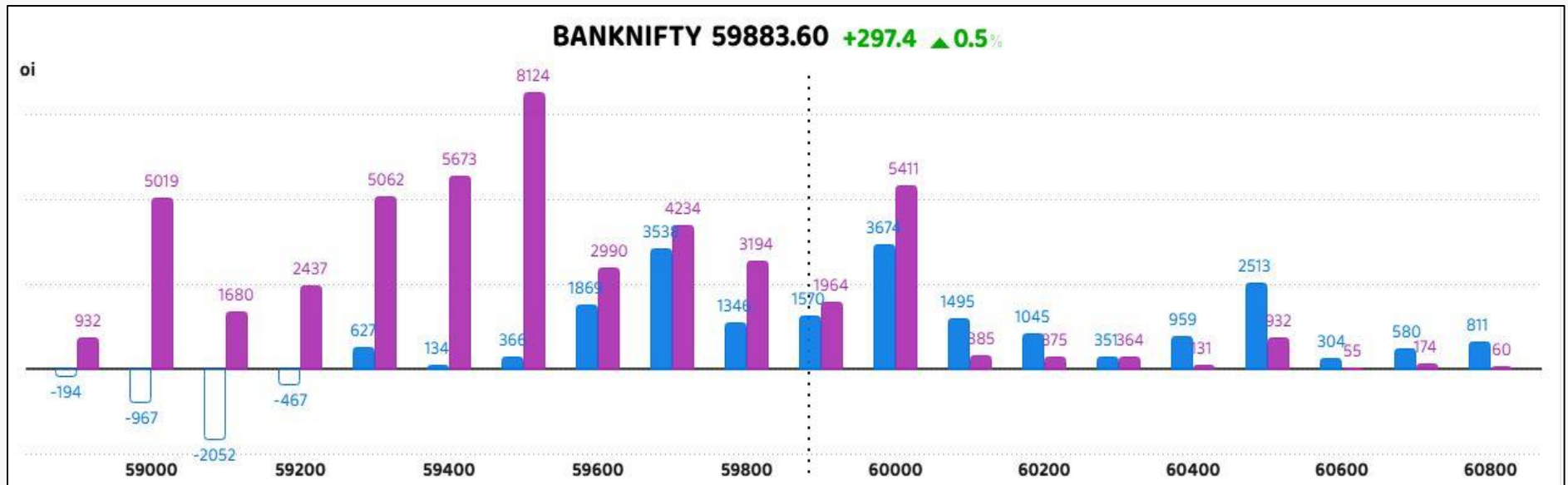
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,400 Call and the 26,000 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	12,102.0	2.8	40.4	53.1	9.2	71.0
BAJAJ FINANCE LT	986.8	-0.3	25.9	34.0	12.6	62.3
HINDUSTAN UNILEV	2,315.9	1.1	15.6	25.8	0.8	59.3
KOTAK MAHINDRA	2,201.1	2.2	17.9	32.4	1.1	53.8
TATA CONSULTANCY	3,206.2	-1.3	19.9	36.2	1.6	52.9

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NTPC LTD	329.6	1.4	16.1	116.6	14.9	1.2
LARSEN & TOUBRO	4,083.5	0.8	14.5	35.5	14.2	1.3
LUPIN LTD	2,109.5	1.4	20.1	40.7	19.7	2.2
ADANI PORTS AND	1,469.8	0.6	20.9	99.7	19.0	2.4
GAIL INDIA LTD	172.2	0.9	21.6	91.4	19.4	3.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	357.3	-0.9	48.5	52.8	21.0	99.0
HFCL LTD	67.8	6.8	59.3	89.4	32.2	98.5
HINDUSTAN ZINC	612.5	-2.1	41.3	54.2	21.8	93.7
KAYNES TECHNOLOG	4,013.0	2.0	40.3	62.9	30.3	74.8
VODAFONE IDEA LT	10.8	-10.8	68.8	212.9	10.0	72.9

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI GREEN ENER	1,015.1	0.8	30.1	74.3	30.1	0.0
AUROBINDO PHARMA	1,183.0	-0.3	23.8	53.8	21.5	0.8
LARSEN & TOUBRO	4,083.5	0.8	14.5	35.5	14.2	0.8
DELHIVERY LTD	403.9	0.4	26.4	58.6	24.4	1.3
LUPIN LTD	2,109.5	1.4	20.1	40.7	19.7	1.5

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BHARATFORG	1,470.4	1.1	25,568	6,063	4.2
CONCOR	525.0	1.1	10,801	2,565	4.2
SUPREMEIND	3,353.8	2.4	11,915	3,194	3.7
TATACONSUM	1,192.0	1.1	6,183	1,718	3.6
NHPC	79.2	0.8	5,748	1,642	3.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
POLICYBZR	1,825.6	-1.8	6,768	7,421	1.1
GRASIM	2,829.0	-0.4	5,125	4,725	0.9
OFSS	7,687.0	0.8	3,592	3,003	0.8
GAIL	172.2	0.9	5,655	4,533	0.8
PNB	123.6	1.0	13,359	10,539	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NMDC	83.2	-0.3	17,536	22,779	77.0
RVNL	357.2	-0.9	27,049	36,276	74.6
IRCTC	684.6	0.3	18,564	26,742	69.4
IDEA	10.8	-10.8	32,915	47,601	69.1
LTF	316.0	3.4	7,868	11,524	68.3

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
IRCTC	684.6	0.3	9,218	13,935	66.1
IDEA	10.8	-10.8	18,381	27,998	65.7
MAZDOCK	2,490.2	1.1	9,013	13,968	64.5
PFC	355.4	1.7	15,739	24,848	63.3
CONCOR	525.0	1.1	6,232	9,882	63.1

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
IDEA	10.8	-10.8	1,13,782	90,380	100.0
SAIL	147.0	4.2	53,496	68,695	77.9
INDUSTOWER	418.8	-0.8	81,531	1,29,275	63.1
JSWSTEEL	1,164.8	4.8	72,034	1,38,839	51.9
LTF	316.0	3.4	27,705	65,139	42.5

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
IDEA	10.8	-10.8	61,302	61,831	99.1
SAIL	147.0	4.2	30,407	42,110	72.2
INDUSTOWER	418.8	-0.8	42,002	62,844	66.8
JSWSTEEL	1,164.8	4.8	34,361	87,434	39.3
TATASTEEL	180.1	2.4	29,739	79,864	37.2

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
RVNL	357.2	-0.9	27,049	16,688	1.6
IRFC	124.6	0.0	17,385	11,267	1.5
IRCTC	684.6	0.3	18,564	13,307	1.4
COALINDIA	399.0	0.3	23,129	18,205	1.3
NMDC	83.2	-0.3	17,536	15,742	1.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SAIL	147.0	4.2	8,485	6,639	1.3
IRFC	124.6	0.0	7,142	6,163	1.2
IRCTC	684.6	0.3	9,218	8,401	1.1
COFORGE	1,663.0	0.5	12,864	11,772	1.1
RVNL	357.2	-0.9	9,409	9,091	1.0

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
INDUSTOWER	418.8	-0.8	81,531	19,146	4.3
SAIL	147.0	4.2	53,496	13,350	4.0
JINDALSTEL	1,053.8	3.2	36,943	9,691	3.8
DABUR	503.6	1.6	20,711	6,702	3.1
IDEA	10.8	-10.8	1,13,782	38,277	3.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SAIL	147.0	4.2	30,407	5,089	6.0
INDUSTOWER	418.8	-0.8	42,002	7,356	5.7
IDEA	10.8	-10.8	61,302	12,187	5.0
DABUR	503.6	1.6	9,250	2,952	3.1
JSWSTEEL	1,164.8	4.8	34,361	11,058	3.1

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	1166784	2.7%	2240	2200	1126614	-1.8%	JIOFIN	300	6434300	1.7%	295	290	5663500	-1.7%
ADANIPTS	1500	1352325	2.1%	1470	1500	651700	2.1%	JSWSTEEL	1160	942300	-0.4%	1165	1100	1458675	-5.6%
APOLLOHOSP	7200	147375	2.2%	7043	7000	112250	-0.6%	KOTAKBANK	2200	982800	0.0%	2201	2160	371200	-1.9%
ASIANPAINT	2860	517750	3.3%	2770	2520	335000	-9.0%	LT	4100	417900	0.4%	4084	4000	375200	-2.0%
AXISBANK	1300	1233750	2.4%	1269	1260	1146250	-0.7%	M&M	3800	310000	2.4%	3709	3700	279600	-0.2%
BAJAJ-AUTO	10000	147000	7.0%	9343	9100	85350	-2.6%	MARUTI	17000	111900	1.8%	16697	16000	105950	-4.2%
BAJAJFINSV	2100	414250	2.9%	2040	2000	363000	-2.0%	MAXHEALTH	1100	384825	5.3%	1045	1040	414225	-0.5%
BAJFINANCE	1000	3039000	1.3%	987	1000	2550750	1.3%	NESTLEIND	1300	520500	0.9%	1288	1200	135500	-6.8%
BEL	400	8245050	0.1%	400	400	5560350	0.1%	NTPC	335	4149000	1.7%	330	310	2364000	-5.9%
BHARTIARTL	2100	1022200	-0.3%	2106	2000	617500	-5.0%	ONGC	245	3980250	1.9%	240	235	3206250	-2.2%
CIPLA	1500	439125	-0.7%	1511	1500	420000	-0.7%	POWERGRID	270	3912100	2.0%	265	250	2183100	-5.5%
COALINDIA	410	5841450	2.8%	399	400	2482650	0.3%	RELIANCE	1600	4754000	1.9%	1570	1560	1598000	-0.7%
DRREDDY	1300	1067500	2.2%	1271	1150	184375	-9.5%	SBILIFE	2080	378000	2.2%	2035	2000	123375	-1.7%
EICHERMOT	8100	152200	10.8%	7313	6900	78600	-5.6%	SBIN	1000	3625500	1.8%	982	980	1695000	-0.2%
ETERNAL	280	5434425	0.7%	278	280	4585675	0.7%	SHRIRAMFIN	1000	2262975	0.4%	996	900	1616175	-9.7%
GRASIM	3000	158500	6.0%	2829	2740	239500	-3.1%	SUNPHARMA	1760	1305150	2.3%	1720	1620	351750	-5.8%
HCLTECH	1700	618800	4.7%	1623	1600	241500	-1.4%	TATACONSUM	1200	539550	0.7%	1192	1180	167200	-1.0%
HDFCBANK	1000	3708650	0.9%	991	940	3121800	-5.2%	TMPV	400	7712000	8.9%	367	360	3553600	-2.0%
HDFCLIFE	770	1019700	2.7%	750	750	1089000	0.0%	TATASTEEL	180	15741000	0.0%	180	170	11440000	-5.6%
HINDALCO	900	1271200	1.5%	887	800	1298500	-9.8%	TCS	3400	1248275	6.0%	3206	3200	595875	-0.2%
HINDUNILVR	2300	941700	-0.7%	2316	2300	772200	-0.7%	TECHM	1800	502200	13.1%	1591	1500	369000	-5.7%
ICICIBANK	1360	5275900	1.3%	1343	1350	2645300	0.5%	TITAN	4200	480900	3.7%	4052	4000	312200	-1.3%
INDIGO	5500	452400	8.7%	5060	5000	759000	-1.2%	TRENT	4300	591600	0.5%	4279	4200	270900	-1.8%
INFY	1660	2022000	2.8%	1615	1620	1159200	0.3%	ULTRACEMCO	12000	63250	1.8%	11784	11500	35450	-2.4%
ITC	410	10440000	1.7%	403	400	3552000	-0.7%	WIPRO	265	4650000	0.7%	263	260	2568000	-1.2%

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

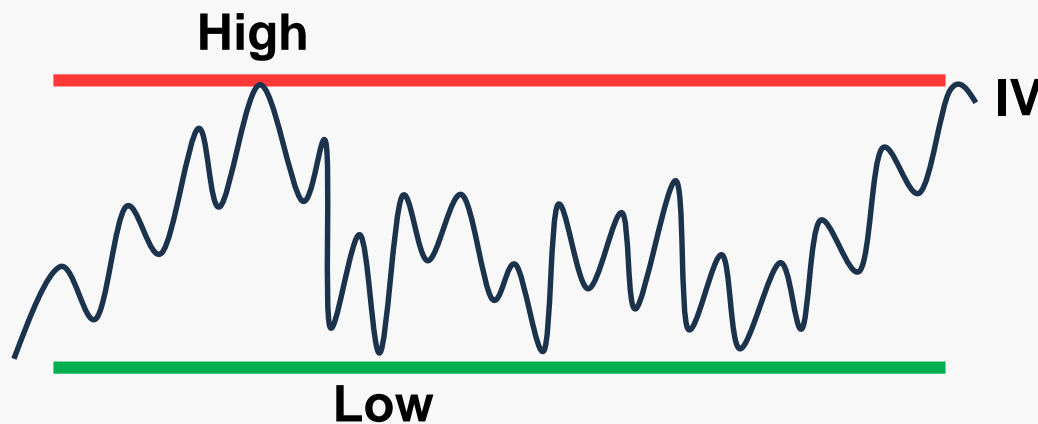
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

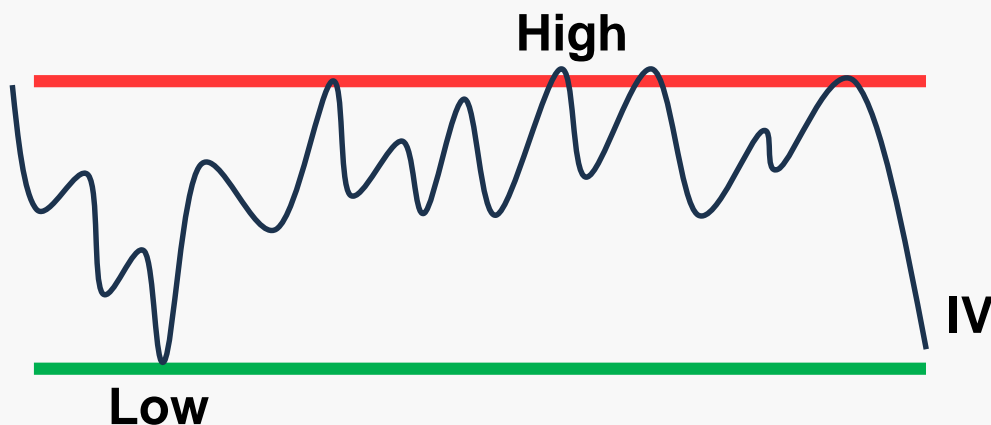
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

- **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

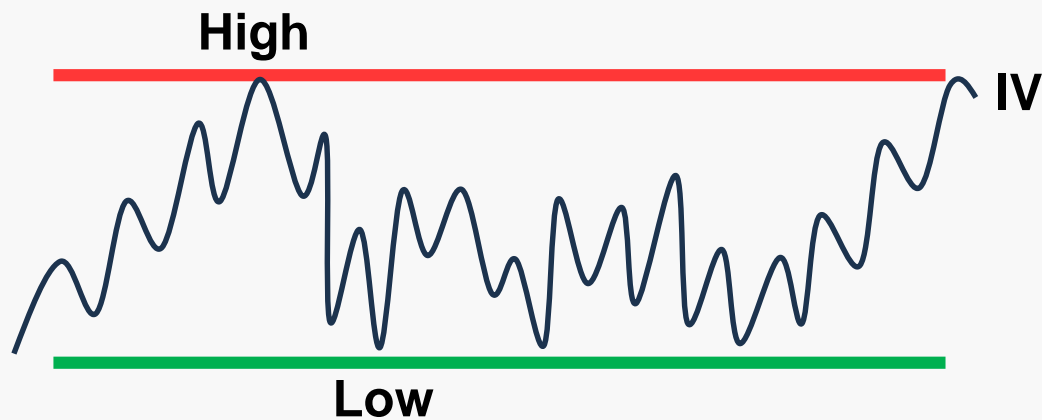


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

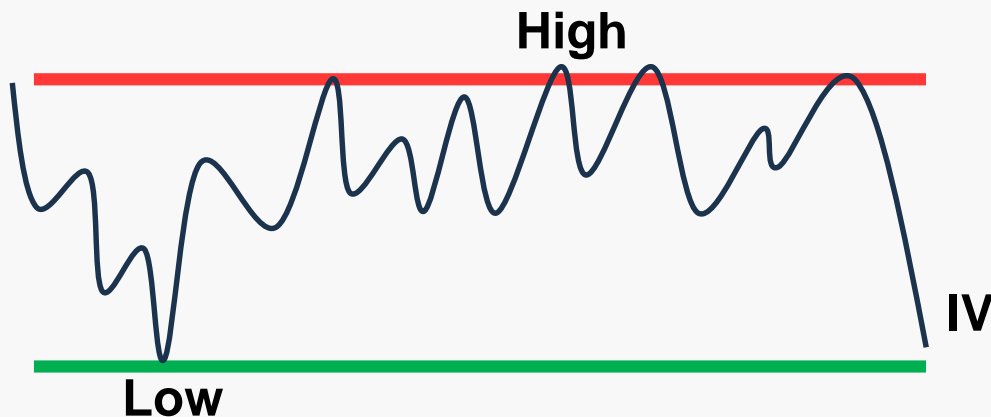


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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