



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,181	0.3% ▼
Open Interest (OI)	1,71,45,180	2.4% ▲
Change in OI (abs)	1,71,45,180	3,95,330 ▲
Premium / Discount (Abs)	-7	28 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	57,969	0.27% ▼
Open interest (OI)	26,21,460	4.3% ▲
Change in OI (abs)	26,21,460	1,07,310 ▲
Premium / Discount (Abs)	133	47 ▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.6	0.38 ▼
Nifty ATM IV (%)	11.94	0.55 ▼
Bank Nifty ATM IV (%)	14.74	0.37 ▼
PCR (Nifty)	1.01	0.27 ▼
PCR (Bank Nifty)	0.92	0.05 ▼

The FII Long Ratio in Index Futures **Drop** to **8.6 %**, **down** from **9.3%** in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
Symbol	Open Interest	% Chg	Future Price	% Chg
ASTRAL	97,11,250	9.3%	1397.9	0.7%
KEI	28,96,600	7.5%	4955	0.5%
HYUNDAI	55,37,400	6.3%	1965.6	0.2%
PATANJALI	3,74,18,600	6.2%	340.55	0.4%
BDL	1,07,40,175	6.1%	1265	0.9%
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
EXIDEIND	2,06,64,000	-7.8%	443.55	1.6%
NUVAMA	16,81,000	-7.7%	1891.8	2.0%
SONACOMS	1,62,27,575	-6.9%	734.75	2.3%
BAJAJFINSV	1,17,02,700	-4.2%	1899.3	2.1%
DALBHARAT	48,20,725	-2.9%	1867.1	0.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NHPC	16,10,80,150	21.5%	79.72	-1.7%
MAZDOCK	68,66,100	11.5%	2346.2	-0.2%
OIL	2,14,32,600	6.8%	444.85	-1.5%
AMBER	13,74,800	6.7%	7617.5	-3.2%
LTF	6,24,69,000	6.6%	305.95	-0.1%

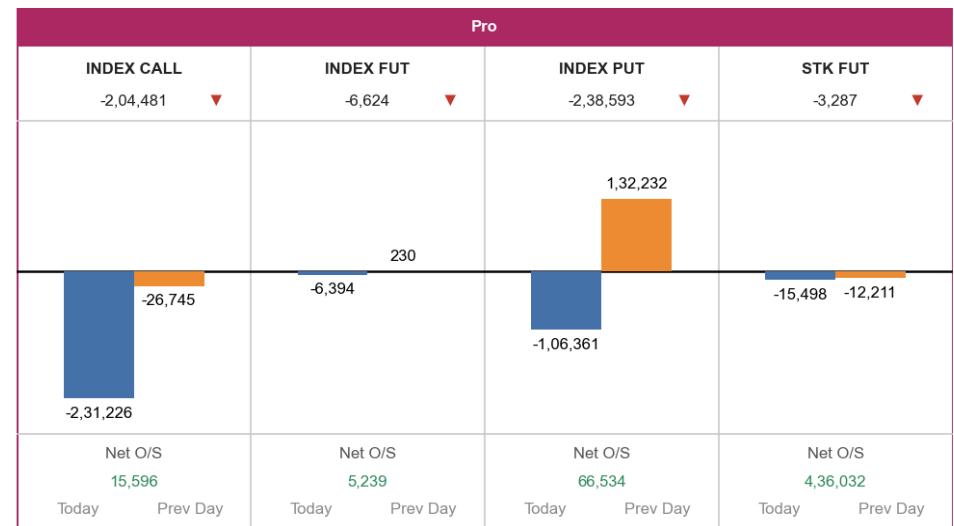
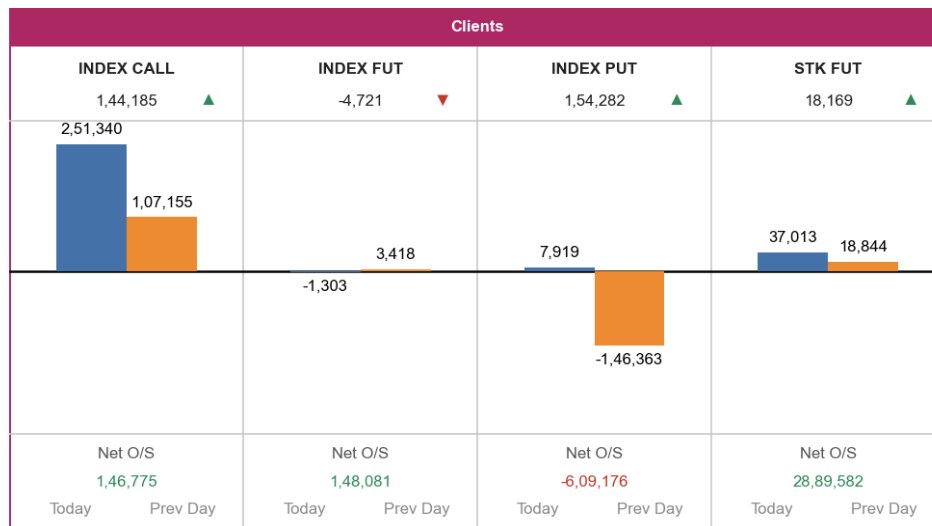
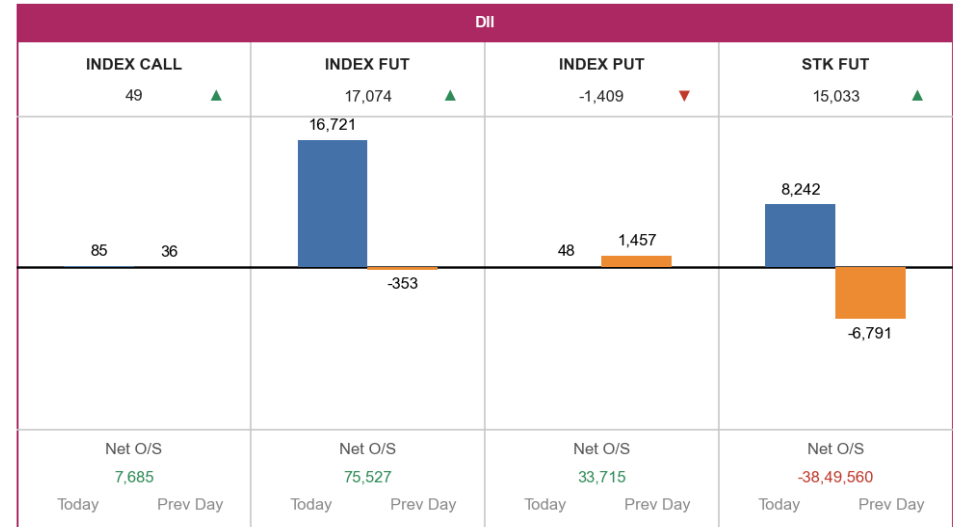
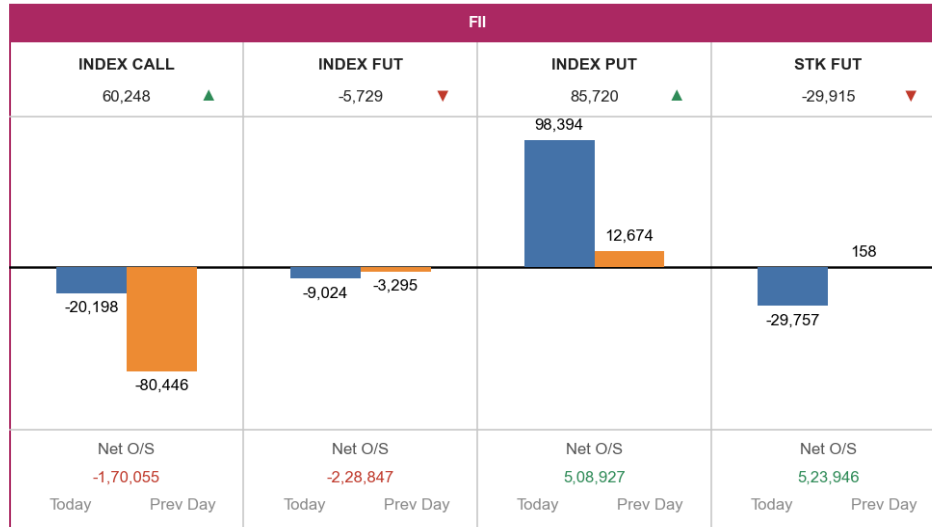
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HDFCAMC	70,76,100	-3.8%	2580.1	-2.5%
DELHIVERY	2,83,59,025	-3.3%	486.1	-0.5%
360ONE	56,52,500	-2.7%	1119	-0.7%
PNB	32,62,64,000	-2.6%	112.03	0.0%
PNBHOUSING	76,20,600	-1.5%	1093.7	-0.7%

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

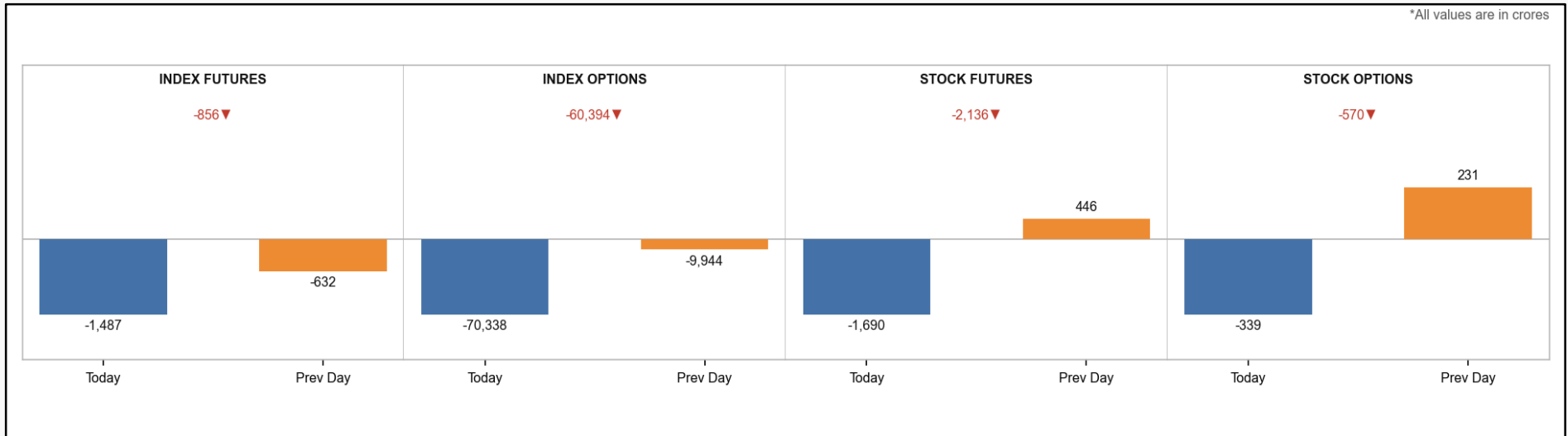
Data Source : NSEBHAVCOPY

Open Interest Trends by Participant

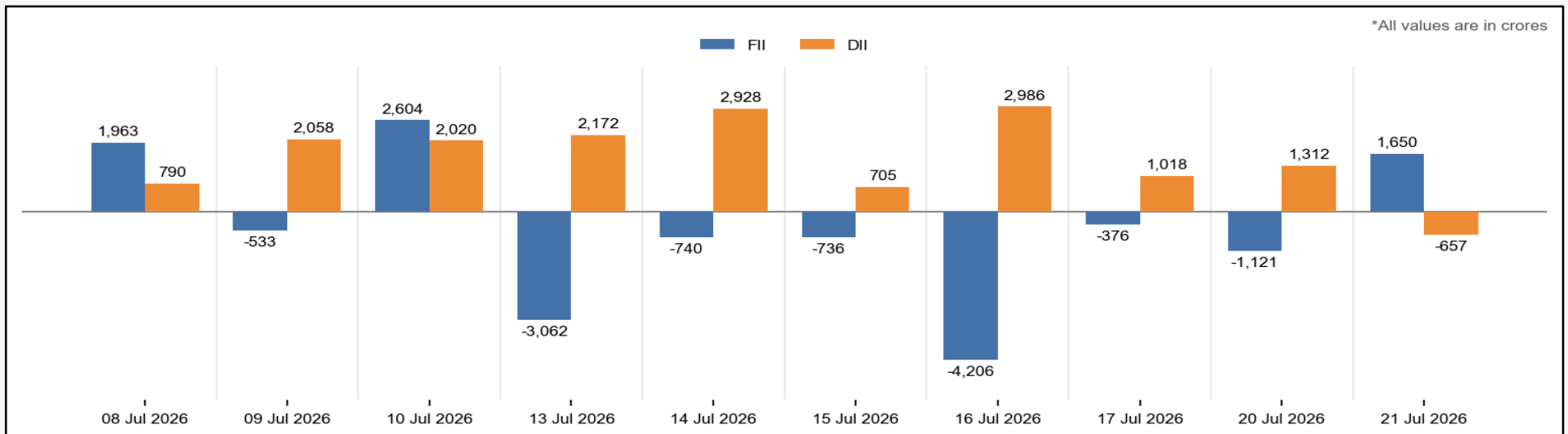
▲ and ▼ indicate positive and negative changes, respectively



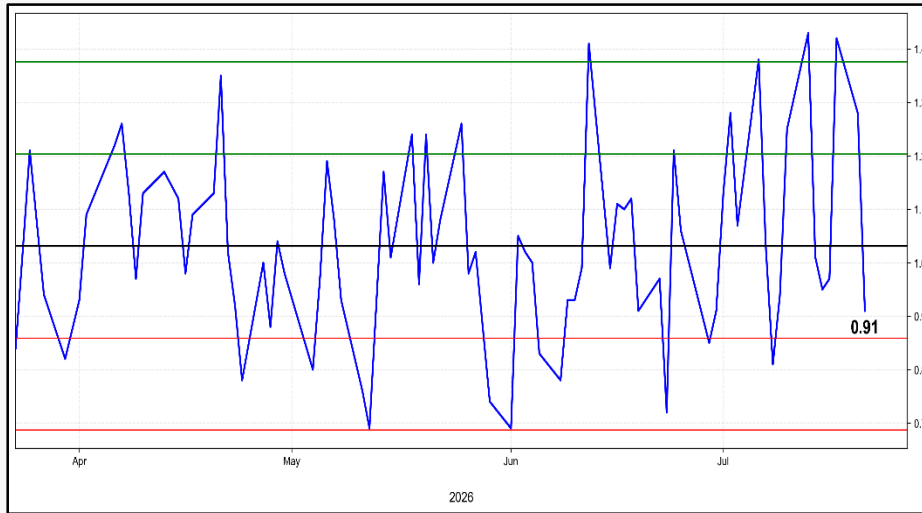
Daily Net Open Interest Change



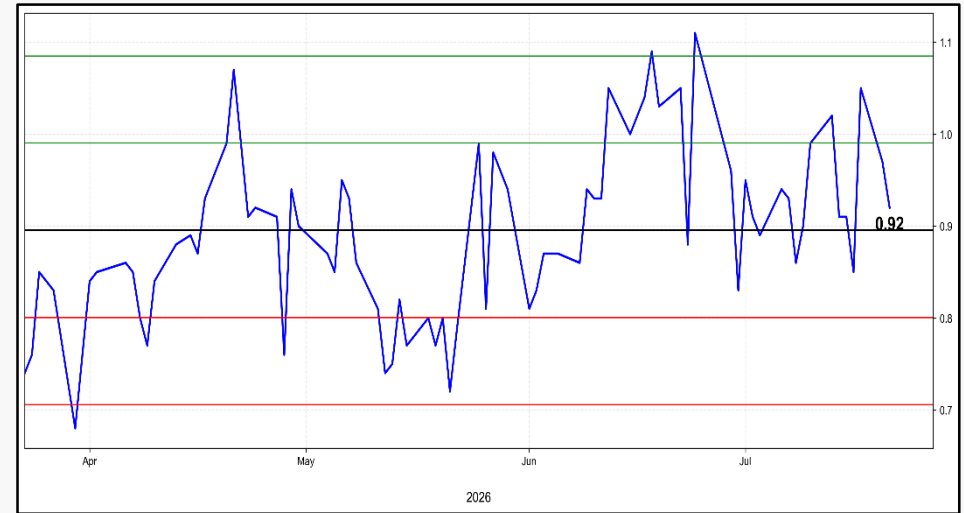
DII and FII Daily Cash Market Flows



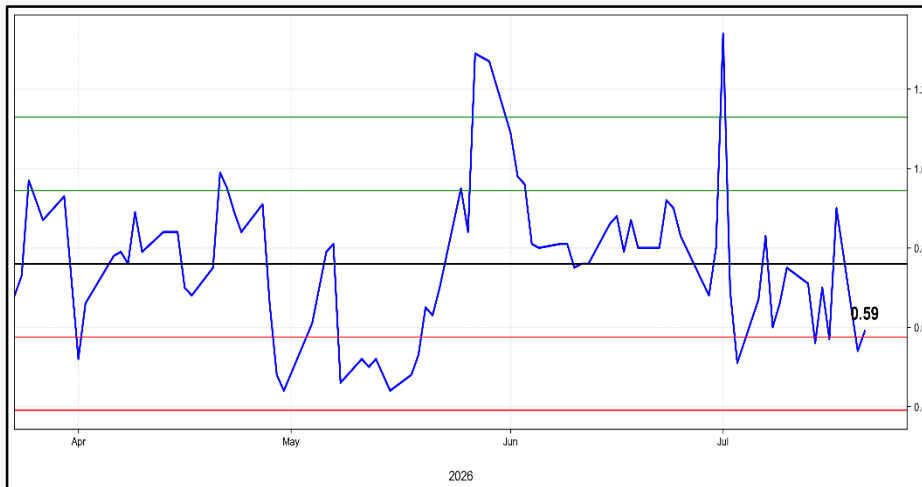
Nifty



Bank Nifty



Fin Nifty



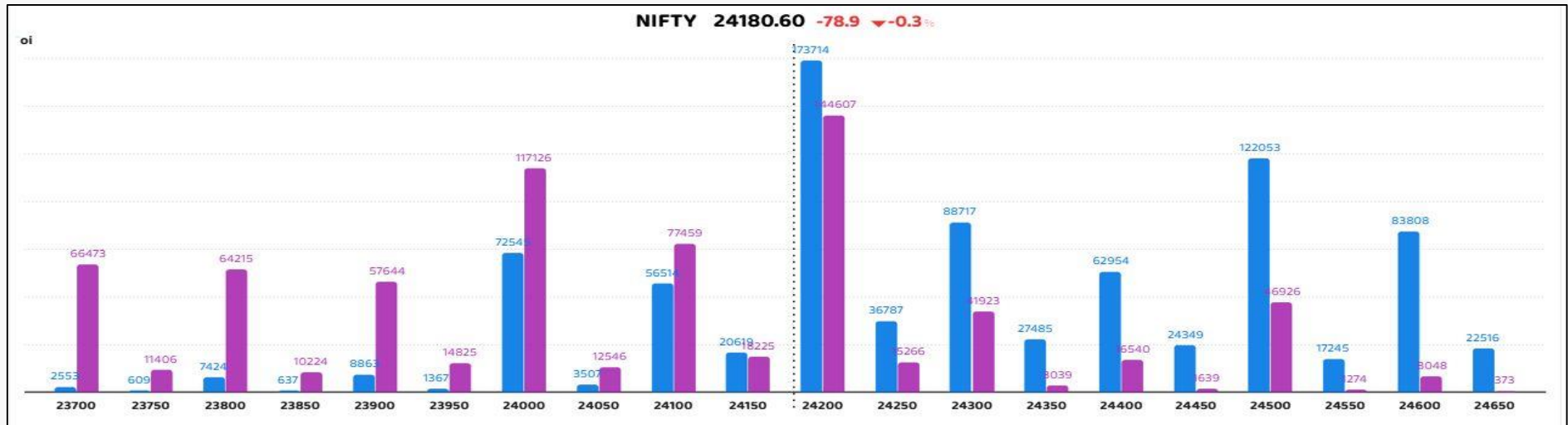
Midcap Select Nifty



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

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

Call ■ Put ■



For Nifty, the 24,200 Call and 24,200 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,000 Call and the 58,000 Put saw the most amount of open interest.

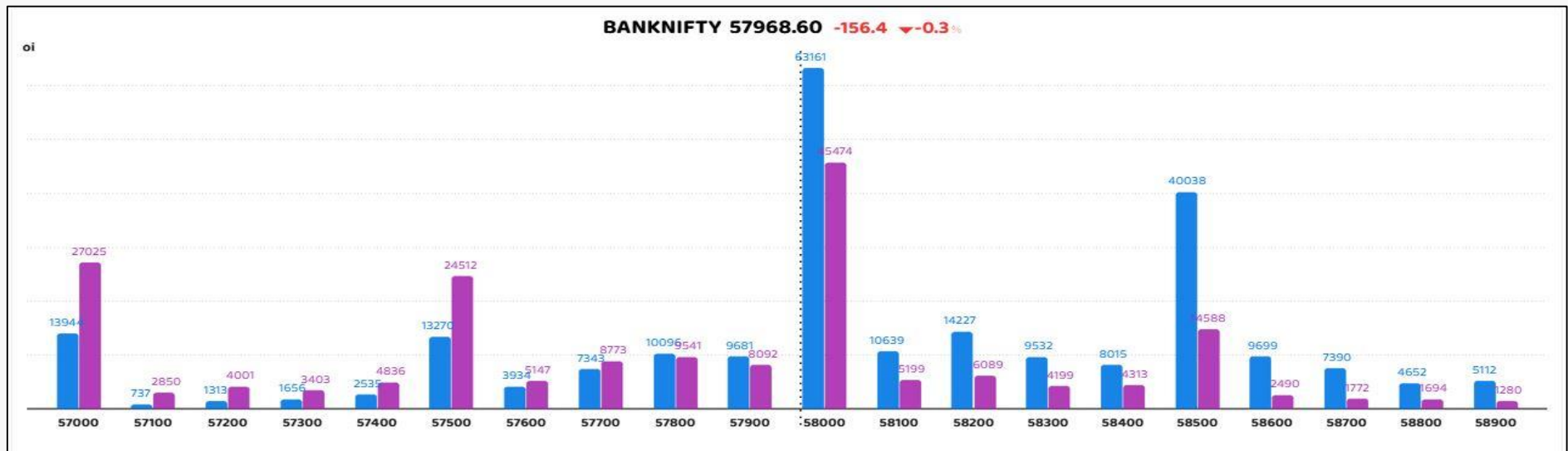
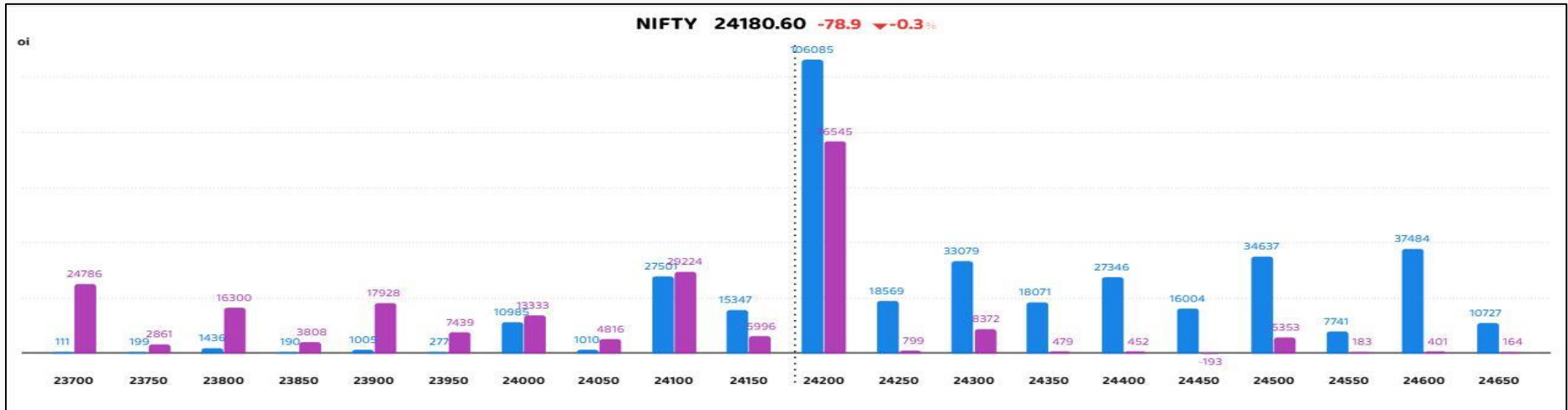


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

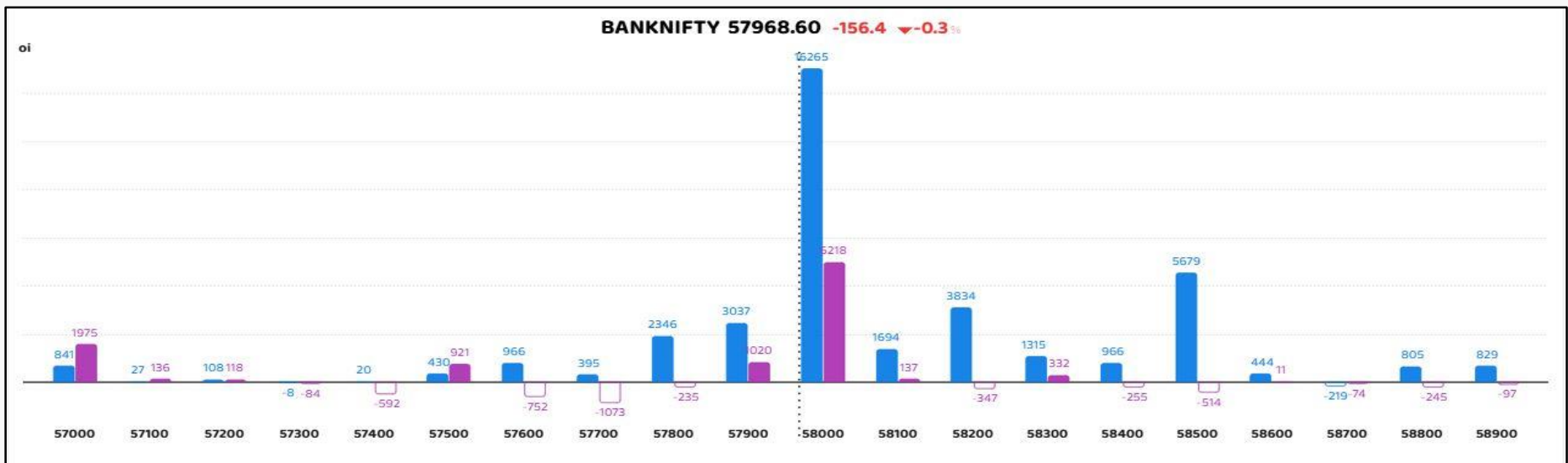
Data Source : NSE, MYFNO

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,200 Call and the 24,200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,000 Call & the 58,000 Put

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BDL	1,273.2	1.2	14,101.0	2,379.0	5.9
MAZDOCK	2,354.1	0.3	12,836.0	3,009.0	4.3
KEI	4,974.5	0.9	8,871.0	2,084.0	4.3
PIIND	2,681.8	0.9	9,927.0	2,361.0	4.2
YESBANK	23.1	0.9	15,421.0	3,720.0	4.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
OFSS	11,632.0	0.1	8,341.0	9,867.0	1.2
SUPREMEIND	3,399.1	-1.1	6,285.0	6,981.0	1.1
COLPAL	2,092.9	-1.0	11,719.0	12,796.0	1.1
KALYANKJIL	577.0	1.2	66,111.0	66,537.0	1.0
HINDPETRO	407.0	0.4	6,176.0	5,727.0	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SRF	2,939.1	2.3	11,603.0	11,000.0	100.0
TVSMOTOR	3,792.0	5.6	24,459.0	23,318.0	100.0
BANDHANBNK	208.8	-1.2	16,639.0	14,235.0	100.0
PAYTM	1,300.4	-3.5	37,025.0	29,864.0	100.0
DRREDDY	1,206.0	-1.4	36,080.0	35,446.0	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
BANDHANBNK	208.8	-1.2	9,870.0	9,516.0	100.0
BANKBARODA	247.7	-2.8	19,227.0	18,890.0	100.0
OBEROIRLTY	1,884.8	0.1	6,420.0	6,164.0	100.0
BANKINDIA	147.1	0.1	6,999.0	6,876.0	100.0
HEROMOTOCO	5,034.0	1.1	13,580.0	13,408.0	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MANAPPURAM	351.8	4.3	36,436.0	30,883.0	100.0
ULTRACEMCO	12,094.0	1.6	2,56,794.0	2,02,941.0	100.0
TVSMOTOR	3,792.0	5.6	1,68,601.0	79,328.0	100.0
PAYTM	1,300.4	-3.5	1,30,846.0	1,43,280.0	91.3
BAJAJ-AUTO	10,403.5	-1.1	1,78,927.0	2,16,196.0	82.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
SONACOMS	732.8	2.6	9,665.0	9,449.0	100.0
BAJAJ-AUTO	10,403.5	-1.1	90,758.0	87,357.0	100.0
TVSMOTOR	3,792.0	5.6	75,070.0	39,400.0	100.0
ULTRACEMCO	12,094.0	1.6	81,091.0	90,856.0	89.3
MANAPPURAM	351.8	4.3	14,260.0	17,351.0	82.2

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POLYCAB	8,903.5	0.2	34,402.0	13,068.0	2.6
PAYTM	1,300.4	-3.5	37,025.0	14,377.0	2.6
ICICIGI	1,624.6	0.1	12,854.0	5,417.6	2.4
HDFCAMC	2,581.1	-2.4	15,331.0	6,714.2	2.3
ULTRACEMCO	12,094.0	1.6	33,942.0	16,082.2	2.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ICICIGI	1,624.6	0.1	8,272.0	3,479.2	2.4
KALYANKJIL	577.0	1.2	44,069.0	20,301.2	2.2
POLYCAB	8,903.5	0.2	20,291.0	9,793.0	2.1
360ONE	1,119.7	-0.6	4,366.0	2,236.7	2.0
PATANJALI	340.2	0.3	14,037.0	7,276.6	1.9

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ULTRACEMCO	12,094.0	1.6	2,56,794.0	26,531.7	9.7
TVSMOTOR	3,792.0	5.6	1,68,601.0	22,286.7	7.6
MANAPPURAM	351.8	4.3	36,436.0	5,584.8	6.5
PAYTM	1,300.4	-3.5	1,30,846.0	21,530.6	6.1
BAJAJ-AUTO	10,403.5	-1.1	1,78,927.0	40,753.1	4.4

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ULTRACEMCO	12,094.0	1.6	81,091.0	11,233.2	7.2
PAYTM	1,300.4	-3.5	68,186.0	11,177.8	6.1
TVSMOTOR	3,792.0	5.6	75,070.0	12,553.2	6.0
BAJAJ-AUTO	10,403.5	-1.1	90,758.0	21,201.8	4.3
MANAPPURAM	351.8	4.3	14,260.0	3,464.2	4.1

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	3200	1557051	0.5%	3183	3200	587409	0.5%	JIOFIN	250	22595250	4.2%	240	240	6098250	0.0%
ADANIPTS	1900	1186075	2.9%	1847	1700	792775	-7.9%	JSWSTEEL	1300	968625	2.6%	1267	1100	1111050	-13.2%
APOLLOHOSP	9000	229000	0.8%	8927	8700	125875	-2.5%	KOTAKBANK	400	11936000	3.6%	386	380	4524000	-1.5%
ASIANPAINT	2700	785750	0.3%	2692	2600	303750	-3.4%	LT	4000	2163000	4.0%	3847	3700	540750	-3.8%
AXISBANK	1300	3354375	3.3%	1258	1300	2141250	3.3%	M&M	3200	1073000	-0.1%	3202	3100	647600	-3.2%
BAJAJ-AUTO	11000	479400	5.7%	10404	10500	186750	0.9%	MARUTI	15000	350750	10.3%	13597	13000	181600	-4.4%
BAJAJFINSV	1860	869400	-2.1%	1901	1880	520800	-1.1%	MAXHEALTH	1140	978600	3.6%	1100	1100	221025	0.0%
BAJFINANCE	1000	1632750	-6.5%	1069	1000	2239500	-6.5%	NESTLEIND	1500	1227500	3.3%	1452	1450	361000	-0.1%
BEL	420	6311325	2.4%	410	410	4574250	0.0%	NTPC	367.5	8853000	5.4%	349	340	1690500	-2.5%
BHARTIARTL	1940	3692650	-0.4%	1948	1900	2090475	-2.5%	ONGC	250	14251500	0.0%	250	250	4407750	0.0%
CIPLA	1500	1630300	4.7%	1433	1400	468775	-2.3%	POWERGRID	290	4109700	1.2%	287	300	1297700	4.6%
COALINDIA	440	5503950	2.0%	431	430	2960550	-0.3%	RELIANCE	1350	9353000	3.6%	1304	1300	3896000	-0.3%
DRREDDY	1400	3166875	16.1%	1206	1200	1003125	-0.5%	SBILIFE	1900	572250	3.9%	1828	1800	263625	-1.5%
EICHERMOT	8000	273000	4.0%	7690	6800	395300	-11.6%	SBIN	1100	6473250	5.3%	1044	1040	3534750	-0.4%
ETERNAL	300	15871625	4.7%	287	280	6726950	-2.3%	SHRIRAMFIN	1050	2163975	-1.1%	1062	1000	993300	-5.8%
GRASIM	3300	708750	3.8%	3180	3100	151250	-2.5%	SUNPHARMA	1960	2829400	-0.1%	1962	1900	963200	-3.2%
HCLTECH	1200	1430800	-3.2%	1240	1200	1105600	-3.2%	TATACONSUM	1100	728200	1.7%	1082	1000	700700	-7.5%
HDFCBANK	800	15643550	5.1%	761	780	7398950	2.4%	TMPV	400	11500800	19.8%	334	350	2940800	4.9%
HDFCLIFE	600	2729100	7.0%	561	570	1878800	1.6%	TATASTEEL	190	18293000	1.5%	187	190	6795250	1.5%
HINDALCO	1000	3647700	5.1%	951	960	1330000	0.9%	TCS	2100	2178225	-5.5%	2221	2000	2358450	-10.0%
HINDUNILVR	2200	1481100	2.7%	2143	2100	669600	-2.0%	TECHM	1600	1125600	1.5%	1576	1500	960600	-4.8%
ICICIBANK	1400	3820600	-4.3%	1463	1400	4307800	-4.3%	TITAN	4650	609350	-0.8%	4689	4450	529900	-5.1%
INDIGO	5300	587550	-0.1%	5305	5100	379200	-3.9%	TRENT	3000	1185750	3.6%	2895	2900	506025	0.2%
INFY	1100	12028400	2.5%	1074	1100	3864800	2.5%	ULTRACEMCO	12400	222700	2.5%	12094	11700	111650	-3.3%
ITC	290	14866050	3.2%	281	280	5668350	-0.4%	WIPRO	180	19911000	2.9%	175	170	13254000	-2.8%

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

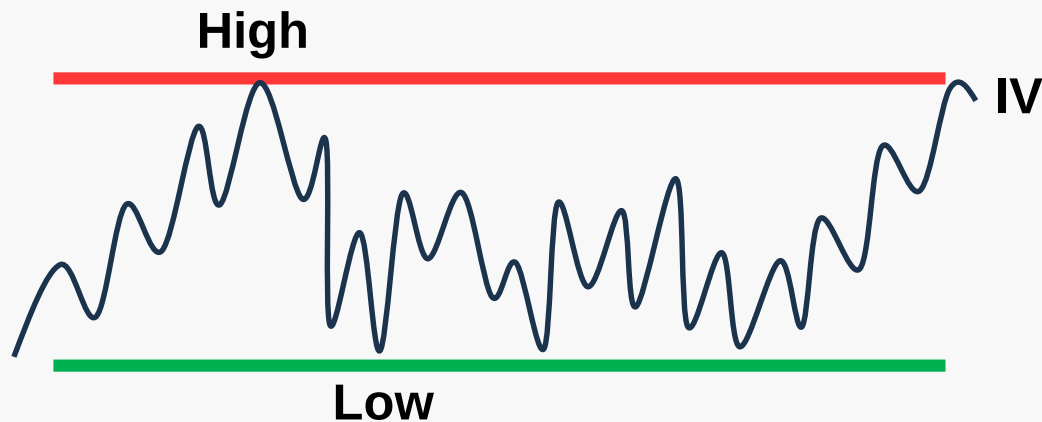
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

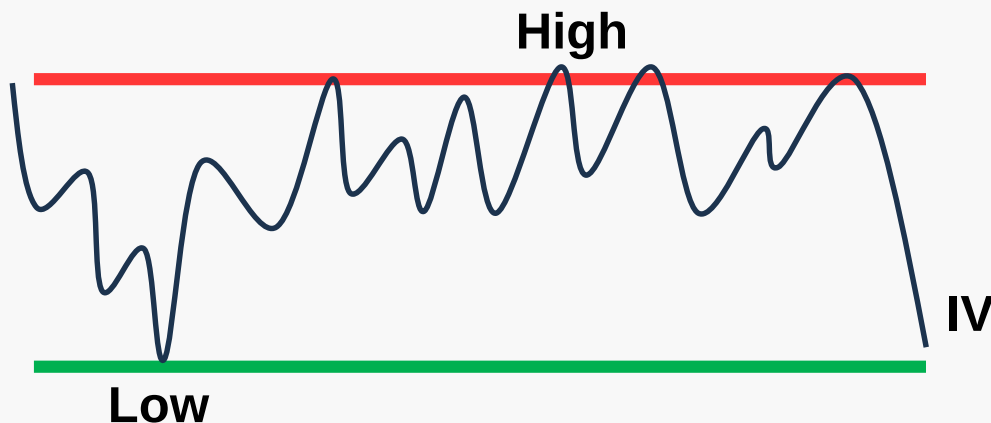
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

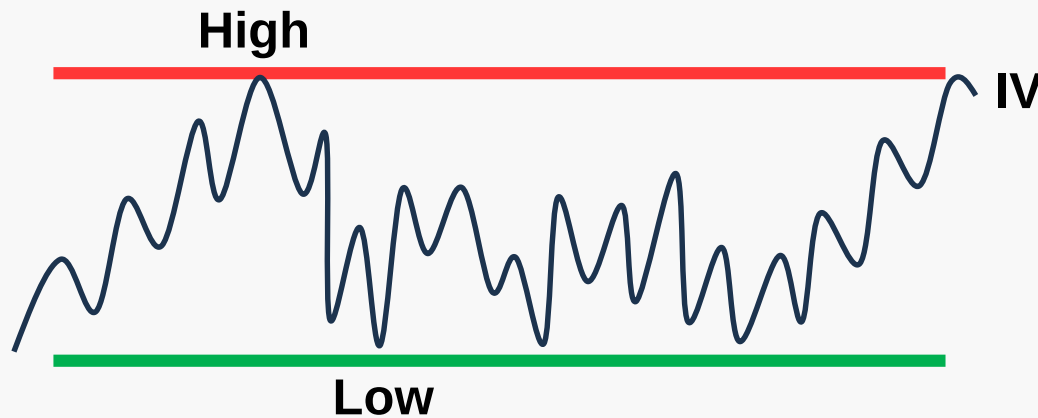


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

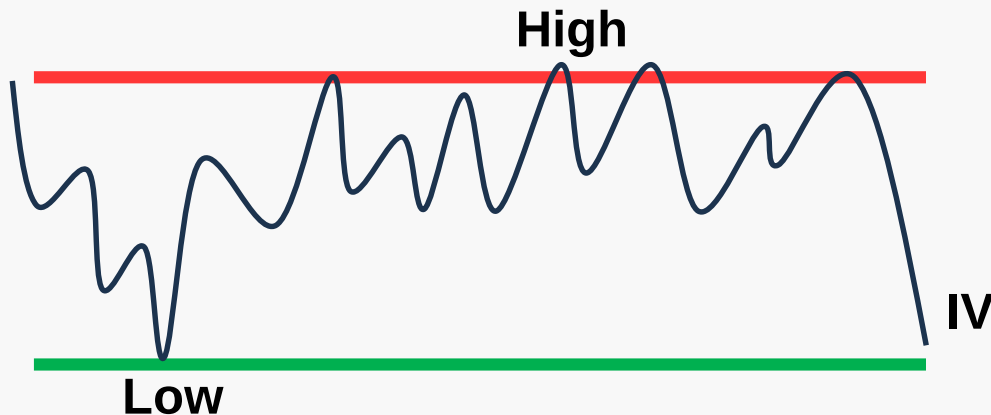


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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