



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,221	0.6%▲
Open Interest (OI)	1,97,84,570	0.7%▲
Change in OI (abs)	1,97,84,570	1,30,695▲
Premium / Discount (Abs)	29	10▲
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,399	0.3%▲
Open interest (OI)	21,81,750	3.9%▲
Change in OI (abs)	21,81,750	80,845▲
Premium / Discount (Abs)	51	40▲
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.13	0.16▲
Nifty ATM IV (%)	9.65	1.1▼
Bank Nifty ATM IV (%)	10.44	1.1▼
PCR (Nifty)	1.44	0.15▲
PCR (Bank Nifty)	1.25	0.02▲

The FII Long Ratio in Index Futures **Jump** to 12.4 %, **Up** from 12.2 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POWERINDIA	1,77,250	5.9%	22389	3.3%
SBILIFE	82,03,125	4.1%	2021.1	0.9%
TECHM	2,41,89,000	3.8%	1458.5	1.4%
LTIM	22,87,050	2.9%	6036	0.9%
BDL	56,38,925	2.7%	1557.2	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BPCL	3,46,29,650	15.1%	365.9	-0.2%
GODREJCP	1,05,51,500	5.0%	1129.2	-1.2%
LICHSGFIN	3,38,45,000	5.0%	555.4	-1.5%
NUVAMA	3,96,025	4.5%	7342	-0.3%
POLYCAB	15,24,875	4.5%	7658.5	-0.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ASHOKLEY	13,35,25,000	-18.6%	146.66	0.7%
RVNL	3,95,82,675	-18.3%	319.6	0.2%
TATAELXSI	27,86,600	-14.1%	5369.5	0.2%
CHOLAFIN	1,51,03,750	-14.0%	1707.2	1.6%
ABB	31,32,375	-13.4%	5130.5	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TMPV	8,47,47,200	-11.9%	360.9	-0.2%
AMBER	15,22,900	-11.5%	7271	-2.1%
OBEROIRLT	43,33,000	-10.2%	1709.5	-0.3%
SAMMAANCAP	11,02,17,600	-10.0%	157.49	-1.7%
ANGELONE	34,18,500	-9.1%	2811.4	-0.2%

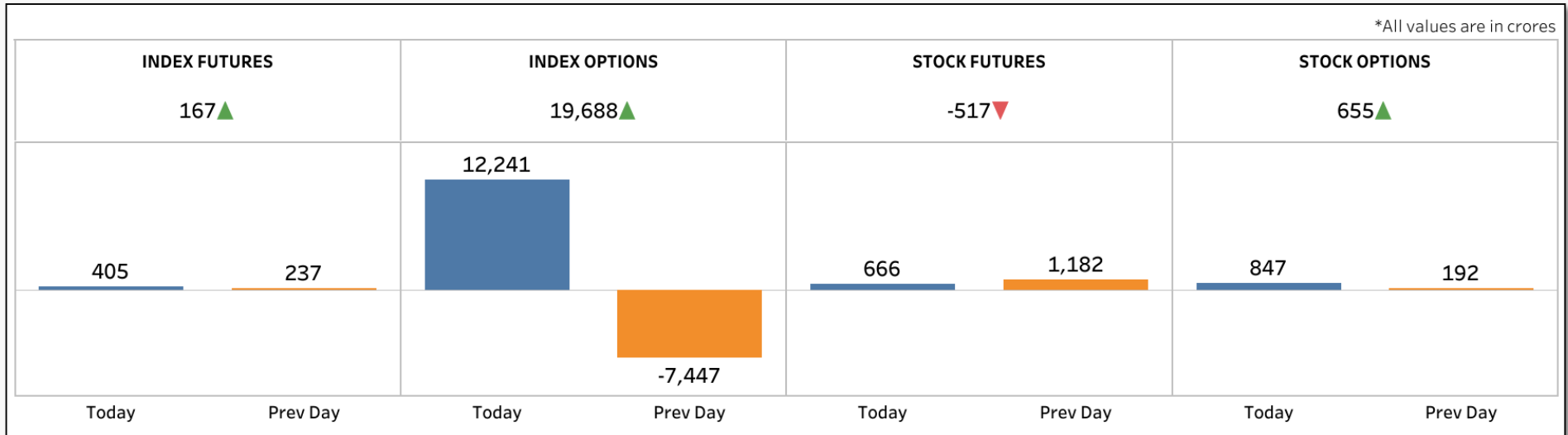
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

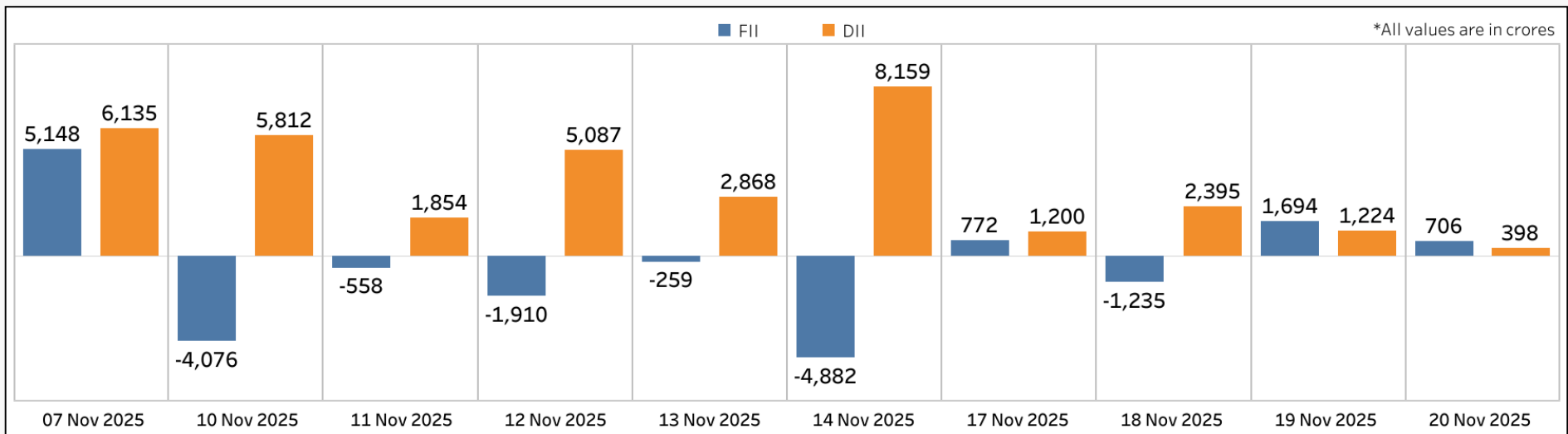
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-2,338 ▼	788 ▲	104,545 ▲	-5,544 ▼	0	12,356 ▲	164 ▲	7,915 ▲
34,002 36,340	2,006 1,218	30,562	7,326 12,870		12,136		21,468 13,553
		-73,983		0 0	-220	164 0	
Net O/S 56,530 Today Prev Day	Net O/S -165,565 Today Prev Day	Net O/S 187,380 Today Prev Day	Net O/S 1,281,340 Today Prev Day	Net O/S 2,381 Today Prev Day	Net O/S 65,688 Today Prev Day	Net O/S 20,627 Today Prev Day	Net O/S -4,427,450 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
147,443 ▲	-13,920 ▼	-80,255 ▼	15,960 ▲	-145,105 ▼	776 ▲	-24,451 ▼	-18,331 ▼
7,367	-19,956 -6,036	24,880 105,135	15,722	103,736	5,814 5,038		
-140,076			-238	-41,369		-55,604 -31,153	-44,516 -26,185
Net O/S -105,551 Today Prev Day	Net O/S 80,379 Today Prev Day	Net O/S -223,371 Today Prev Day	Net O/S 2,705,950 Today Prev Day	Net O/S 46,640 Today Prev Day	Net O/S 19,498 Today Prev Day	Net O/S 15,365 Today Prev Day	Net O/S 440,160 Today Prev Day

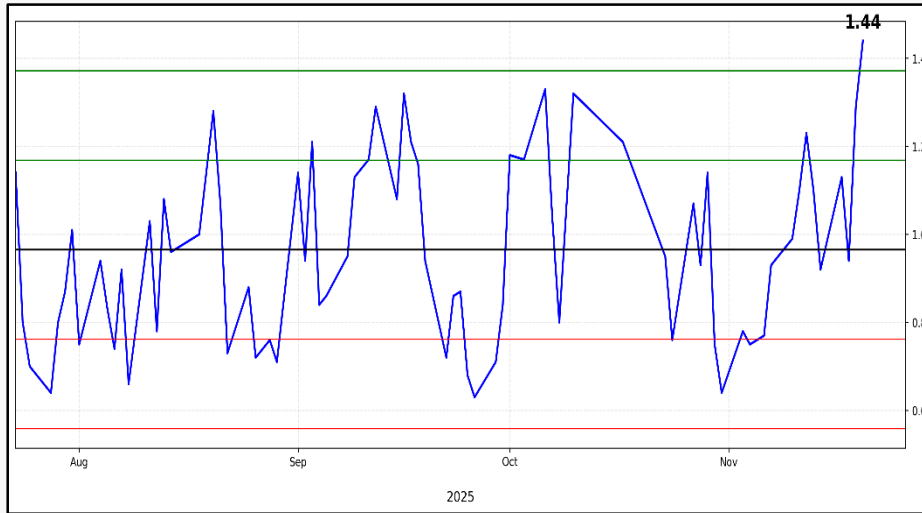
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



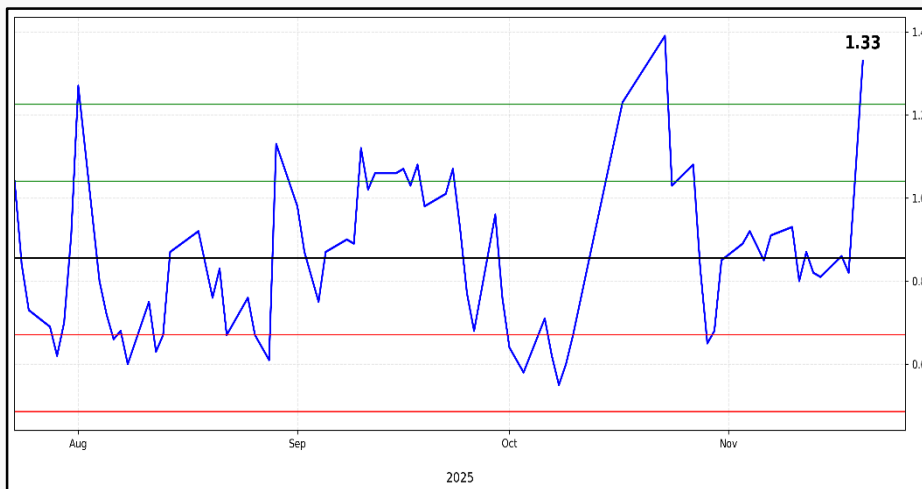
Nifty



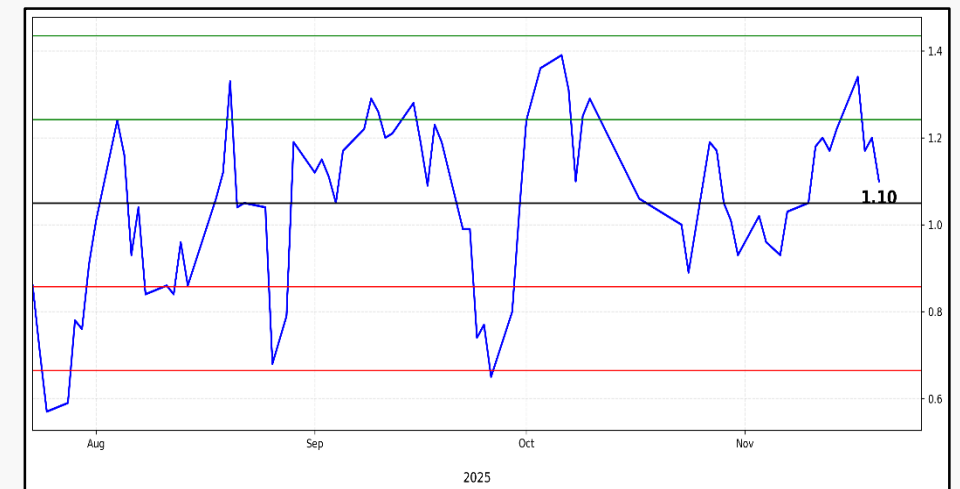
Bank Nifty



Fin Nifty

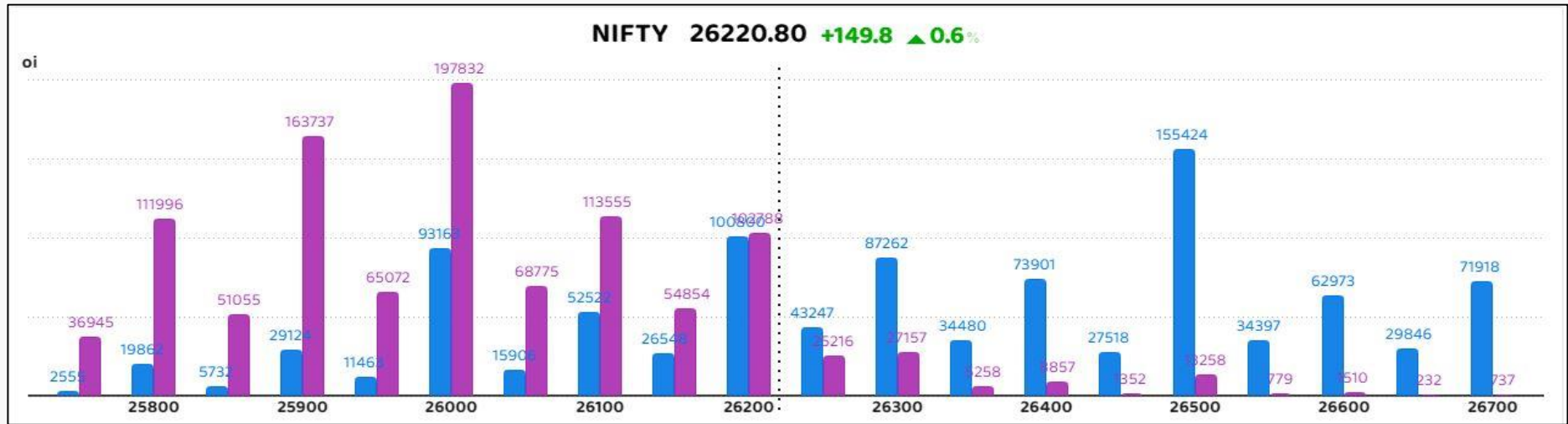


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,500 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.

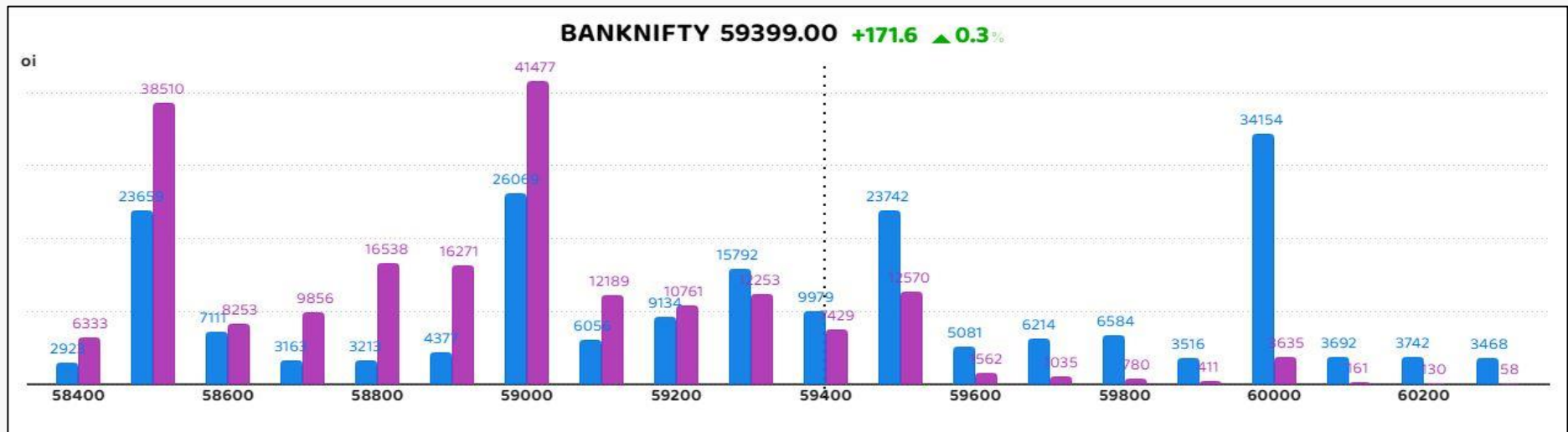
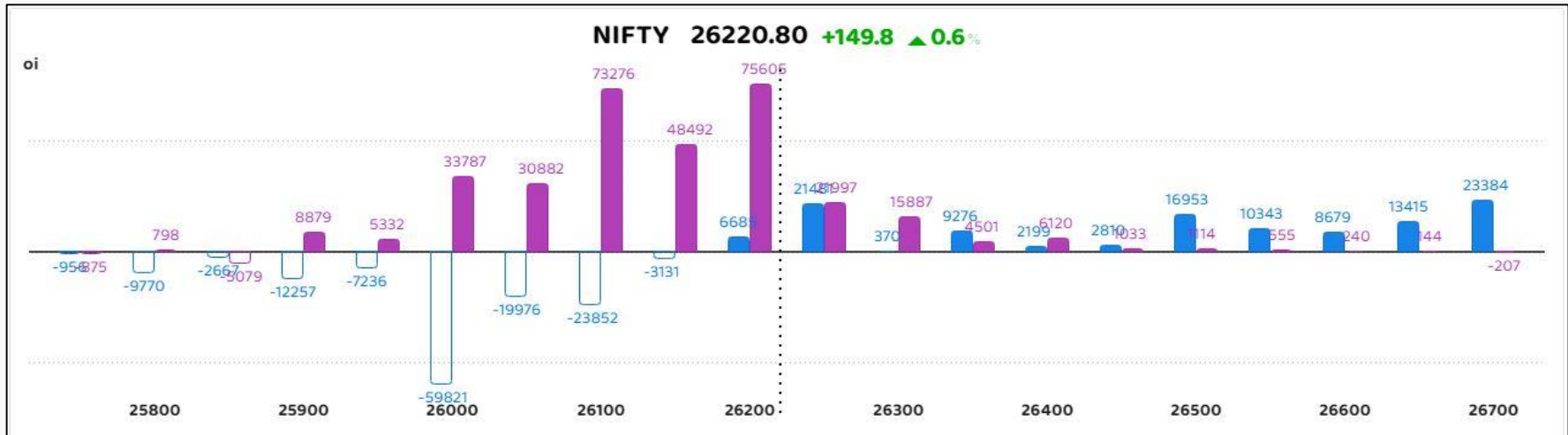


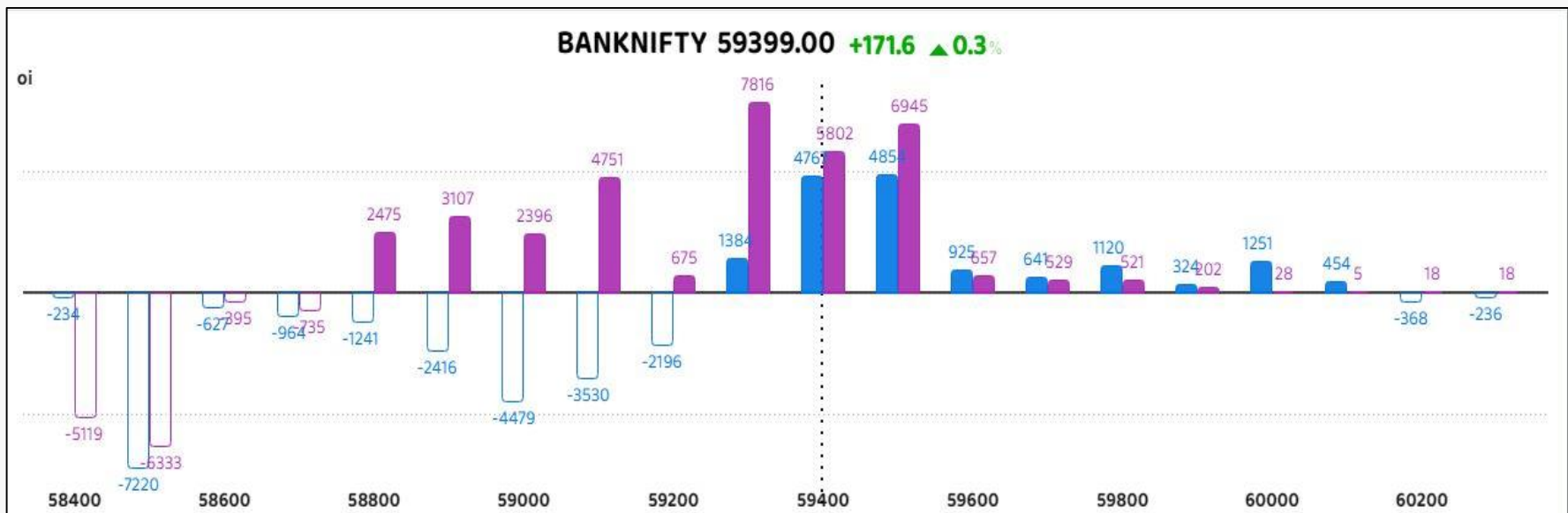
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 26,200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,500 Call & the 59,300 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NMDC LTD	74.5	-1.1	94.2	94.2	20.8	100.0
VOLTAS LTD	1411.8	0.7	35.1	46.9	16.9	60.7
ICICI LOMBARD GE	2037.6	-0.2	22.4	38.2	3.2	54.9
SHREE CEMENT	26480.0	-0.1	21.0	31.9	7.9	54.9
HDFC BANK LTD	1008.9	1.4	15.9	28.0	1.5	54.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BAJAJ FINANCE LT	1028.6	2.3	20.7	34.0	20.7	0.0
INTERGLOBE AVIAT	5785.5	0.5	13.2	43.2	13.2	0.0
POWER FINANCE	372.8	-0.2	22.8	51.5	22.8	0.0
GAIL INDIA LTD	184.3	0.1	20.6	91.4	20.6	0.0
EXIDE INDUS LTD	380.8	0.0	21.5	44.8	21.5	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
NMDC LTD	74.46	-1.1	94.2	94.2	20.8	100.0
JSW ENERGY LTD	504.85	-1.7	52.0	52.1	24.3	100.0
PERSISTENT SYS	6350.5	0.6	37.9	59.3	25.5	76.4
VOLTAS LTD	1411.8	0.7	35.1	46.9	16.9	68.8
PAGE INDUSTRIES	38565	-0.6	25.8	39.9	13.0	65.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BAJAJ FINANCE LT	1028.6	2.3	20.7	34.0	20.7	0.0
INTERGLOBE AVIAT	5785.5	0.5	13.2	43.2	13.2	0.0
LODHA DEVELOPERS	1200.8	-0.1	28.0	57.6	28.0	0.0
MAZAGON DOCK SHI	2829.5	1.7	31.8	48.4	31.8	0.0
POWER FINANCE	372.8	-0.2	22.8	51.5	22.8	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
YESBANK	22.6	-1.3	9,868	1,932	5.1
TITAGARH	866.2	-0.6	8,873	1,768	5.0
PAGEIND	38,565.0	-0.6	22,942	4,679	4.9
KPITTECH	1,196.6	-0.5	12,126	2,502	4.8
MANKIND	2,239.5	0.7	6,637	1,481	4.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
AUROPHARMA	1,207.7	-2.3	16,074	14,519	0.9
SAMMAANCAP	157.0	-1.6	4,977	4,413	0.9
MUTHOOTFIN	3,697.5	-0.1	15,849	12,825	0.8
VOLTAS	1,411.8	0.7	29,803	23,599	0.8
AUBANK	919.3	-0.7	7,289	5,641	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NBCC	116.0	2.6	8,493	8,235	100.0
NMDC	74.5	-1.1	22,779	22,623	100.0
POWERINDIA	22,397.0	3.6	7,952	6,019	100.0
GMRAIRPORT	103.3	0.3	22,744	22,759	99.9
CROMPTON	270.0	-1.6	15,402	15,585	98.8

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
BIOCON	395.2	-3.6	9,992	9,428	100.0
CAMS	4,014.5	2.2	7,809	7,809	100.0
CONCOR	515.4	-0.4	8,797	8,638	100.0
CROMPTON	270.0	-1.6	7,827	7,610	100.0
INOXWIND	138.1	-1.1	5,948	5,785	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
EICHERMOT	7,125.5	3.3	1,75,624	1,65,743	100.0
NBCC	116.0	2.6	38,296	31,421	100.0
POWERINDIA	22,397.0	3.6	60,733	54,808	100.0
360ONE	1,142.1	2.0	18,680	20,073	93.1
CAMS	4,014.5	2.2	78,932	85,011	92.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BIOCON	395.2	-3.6	36,977	36,345	100.0
NBCC	116.0	2.6	12,949	12,004	100.0
CAMS	4,014.5	2.2	25,218	34,010	74.1
POWERINDIA	22,397.0	3.6	19,874	30,860	64.4
HEROMOTOCO	5,999.5	2.1	99,136	1,73,417	57.2

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POWERINDIA	22,397.0	3.6	7,952	3,636	2.2
TMPV	359.8	-0.3	1,03,468	48,372	2.1
SAMMAANCAP	157.0	-1.6	15,427	7,234	2.1
BIOCON	395.2	-3.6	14,210	6,896	2.1
GLENMARK	1,878.0	2.0	19,541	9,525	2.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HEROMOTOCO	5,999.5	2.1	27,019	11,253	2.4
GMRAIRPORT	103.3	0.3	13,623	6,609	2.1
GLENMARK	1,878.0	2.0	10,727	5,621	1.9
BIOCON	395.2	-3.6	9,992	5,318	1.9
POWERINDIA	22,397.0	3.6	6,315	3,495	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
EICHERMOT	7,125.5	3.3	1,75,624	20,341	8.6
POWERINDIA	22,397.0	3.6	60,733	8,398	7.2
NBCC	116.0	2.6	38,296	6,368	6.0
IEX	143.1	4.4	65,423	12,779	5.1
CDSL	1,640.1	1.1	1,37,873	27,406	5.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
NBCC	116.0	2.6	12,949	2,376	5.4
EICHERMOT	7,125.5	3.3	51,794	10,776	4.8
HEROMOTOCO	5,999.5	2.1	99,136	24,344	4.1
BIOCON	395.2	-3.6	36,977	9,252	4.0
POWERINDIA	22,397.0	3.6	19,874	5,545	3.6

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	2520.65	1412130	3.0%	2446	2423.7	880959	-0.9%	JIOFIN	310	9512800	0.5%	308	310	4737600	0.5%
ADANIPTS	1500	2071950	0.6%	1491	1500	927675	0.6%	JSWSTEEL	1220	1083375	4.3%	1170	1150	550125	-1.7%
APOLLOHOSP	7500	296875	1.0%	7423	7000	83500	-5.7%	KOTAKBANK	2200	1687600	4.8%	2099	2100	1005200	0.1%
ASIANPAINT	3000	1535250	4.9%	2860	2800	1152750	-2.1%	LT	4100	796075	1.6%	4037	4000	432425	-0.9%
AXISBANK	1300	2037500	1.2%	1285	1260	1494375	-2.0%	M&M	3800	660200	2.2%	3717	3600	453000	-3.1%
BAJAJ-AUTO	9000	267000	0.2%	8980	8800	111225	-2.0%	MARUTI	16000	352200	1.3%	15801	15500	129700	-1.9%
BAJAJFINSV	2100	636250	0.2%	2096	2000	519250	-4.6%	MAXHEALTH	1200	856800	2.7%	1169	1100	443100	-5.9%
BAJFINANCE	1100	3679500	6.9%	1029	1000	1654500	-2.8%	NESTLEIND	1300	1589000	1.6%	1279	1300	172000	1.6%
BEL	430	11877375	1.7%	423	420	3398625	-0.7%	NTPC	335	7296000	2.6%	327	300	2835000	-8.1%
BHARTIARTL	2100	2971125	-2.7%	2158	2100	1495775	-2.7%	ONGC	254	15552000	2.4%	248	234	2666250	-5.7%
CIPLA	1600	1522125	4.6%	1529	1500	418125	-1.9%	POWERGRID	290	4432700	4.6%	277	270	1877200	-2.6%
COALINDIA	389.75	4374000	2.7%	380	439.75	1929150	15.8%	RELIANCE	1520	4394000	-1.9%	1549	1500	4363000	-3.2%
DRREDDY	1300	1656875	4.1%	1249	1200	648750	-3.9%	SBILIFE	2020	2470500	-0.4%	2027	2000	736875	-1.3%
EICHERMOT	7500	245000	5.3%	7126	7000	213325	-1.8%	SBIN	970	4183500	-1.2%	982	960	3592500	-2.2%
ETERNAL	330	10160750	7.5%	307	300	7364725	-2.2%	SHRIRAMFIN	820	1489125	-0.8%	827	800	1824900	-3.2%
GRASIM	3000	910750	9.1%	2749	2700	168500	-1.8%	SUNPHARMA	1740	834050	-2.1%	1777	1740	416850	-2.1%
HCLTECH	1700	929600	3.3%	1645	1600	801500	-2.8%	TATACONSUM	1200	798600	2.2%	1174	1050	231550	-10.6%
HDFCBANK	1020	3843950	1.1%	1009	950	2451900	-5.8%	TMPV	380	9629600	5.6%	360	350	2864800	-2.7%
HDFCLIFE	820	1783100	7.6%	762	740	1120900	-2.9%	TATASTEEL	185	91921500	7.3%	172	180	11137500	4.4%
HINDALCO	800	2195900	0.0%	800	800	1665300	0.0%	TCS	3200	1237775	1.8%	3145	3000	669375	-4.6%
HINDUNILVR	2500	1839000	2.9%	2428	2500	485400	2.9%	TECHM	1480	1419000	1.6%	1456	1440	435000	-1.1%
ICICIBANK	1400	5756100	1.2%	1383	1380	2200800	-0.2%	TITAN	4000	428575	2.5%	3902	3700	353850	-5.2%
INDIGO	5900	489900	2.0%	5786	5500	119400	-4.9%	TRENT	4800	768300	9.4%	4389	4400	312700	0.3%
INFY	1600	3176800	4.1%	1537	1500	2125200	-2.4%	ULTRACEMCO	12000	166850	2.1%	11753	11000	63800	-6.4%
ITC	420	9163200	3.6%	405	420	2350400	3.6%	WIPRO	250	10287000	1.5%	246	245	4245000	-0.5%

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

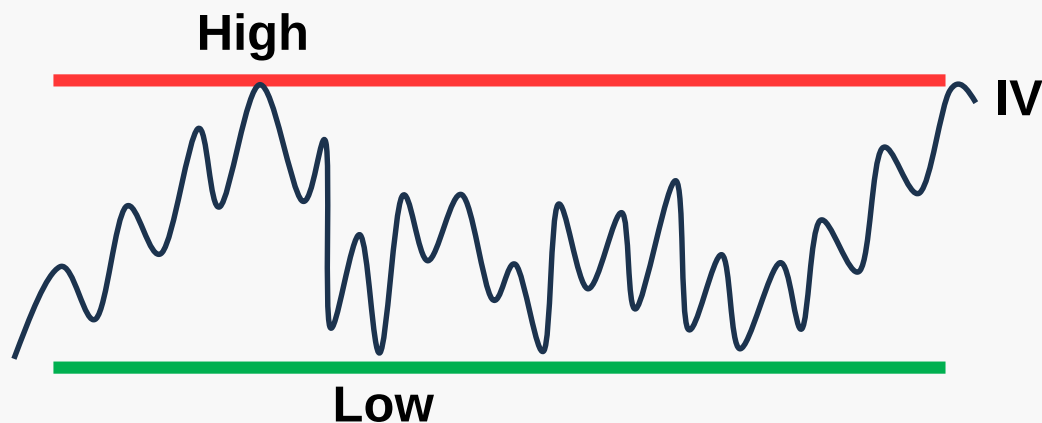
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

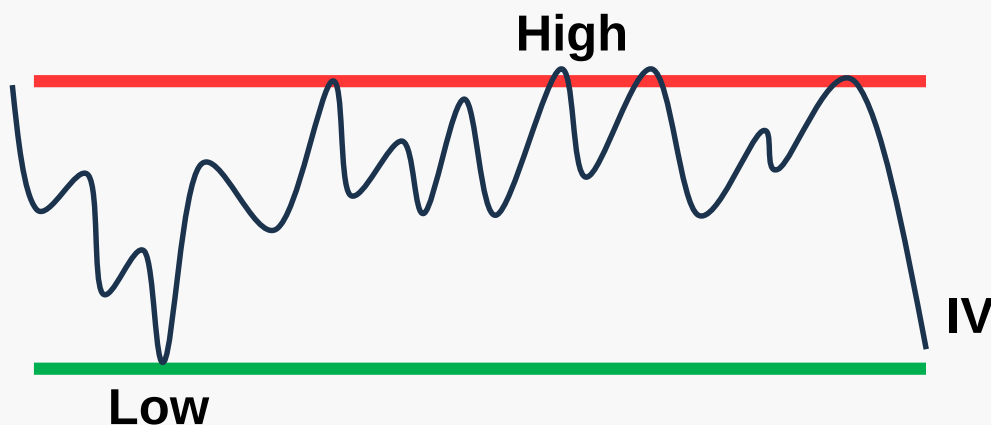
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

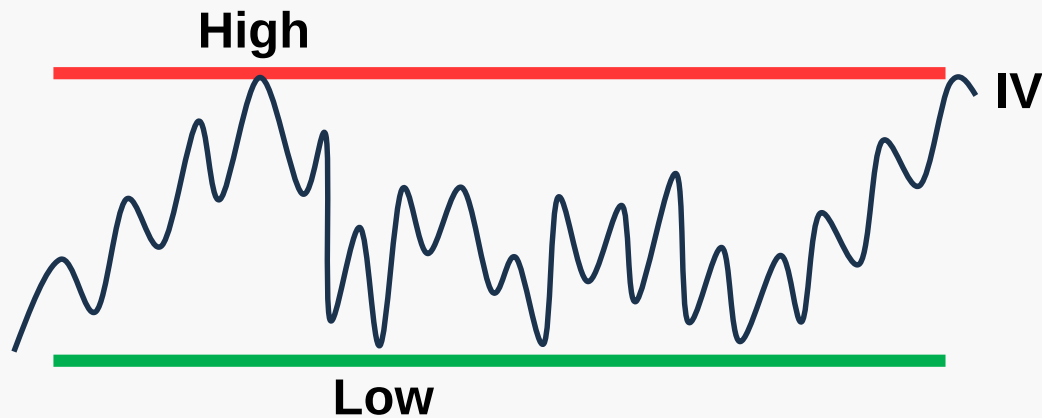


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

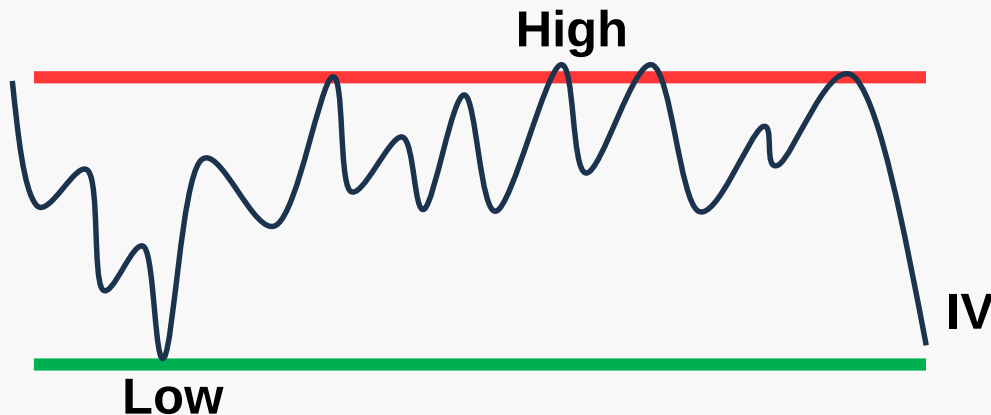


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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