



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,589	0.2% ▼
Open Interest (OI)	2,01,50,750	5.4% ▲
Change in OI (abs)	2,01,50,750	10,37,625 ▲
Premium / Discount (Abs)	97	21 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,182	0.5% ▲
Open interest (OI)	20,01,865	1.7% ▼
Change in OI (abs)	20,01,865	35,260 ▼
Premium / Discount (Abs)	305	28 ▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	12.56	0.15 ▲
Nifty ATM IV (%)	10.50	0.3 ▼
Bank Nifty ATM IV (%)	11.59	0.2 ▼
PCR (Nifty)	0.93	0.16 ▲
PCR (Bank Nifty)	0.96	0.13 ▲

The FII Long Ratio in Index Futures **Drop** to 13.2 %, **down** from 14.2 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LTF	5,13,95,368	10.4%	304.7	10.2%
ADANIGREEN	2,04,94,800	8.4%	1064.9	0.1%
BRITANNIA	38,07,000	7.1%	6185	2.3%
LICI	97,74,800	5.5%	928.7	3.4%
FORTIS	1,03,90,425	4.5%	1022.7	1.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
AMBER	14,56,600	73.2%	6926.5	-10.2%
ABB	29,23,750	22.5%	5002.5	-4.2%
BLUESTARCO	18,84,025	11.9%	1760.5	-1.3%
CYIENT	46,17,200	8.1%	1118	-2.6%
CUMMINSIND	31,38,600	5.8%	4310.8	-0.6%

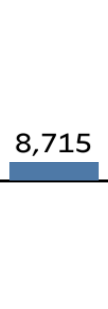
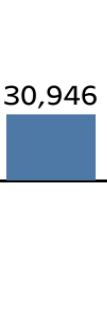
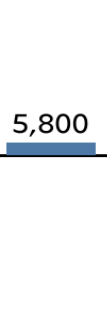
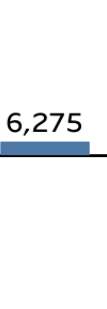
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CDSL	90,80,575	-6.3%	1586.2	3.3%
LUPIN	1,23,41,150	-4.2%	1975.6	0.7%
ANGELONE	31,41,750	-4.1%	2613.1	5.0%
ABCAPITAL	8,20,66,300	-2.9%	338.75	3.1%
IIFL	1,48,54,950	-2.7%	527.35	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
UNOMINDA	44,56,100	-6.7%	1235.1	-0.3%
PPLPHARMA	1,99,46,000	-3.6%	198.51	-0.5%
SBIN	7,75,37,250	-3.0%	958.85	-0.4%
JUBLFOOD	2,15,70,000	-2.7%	577.4	-1.2%
POLYCAB	15,03,625	-2.7%	7556	-0.8%

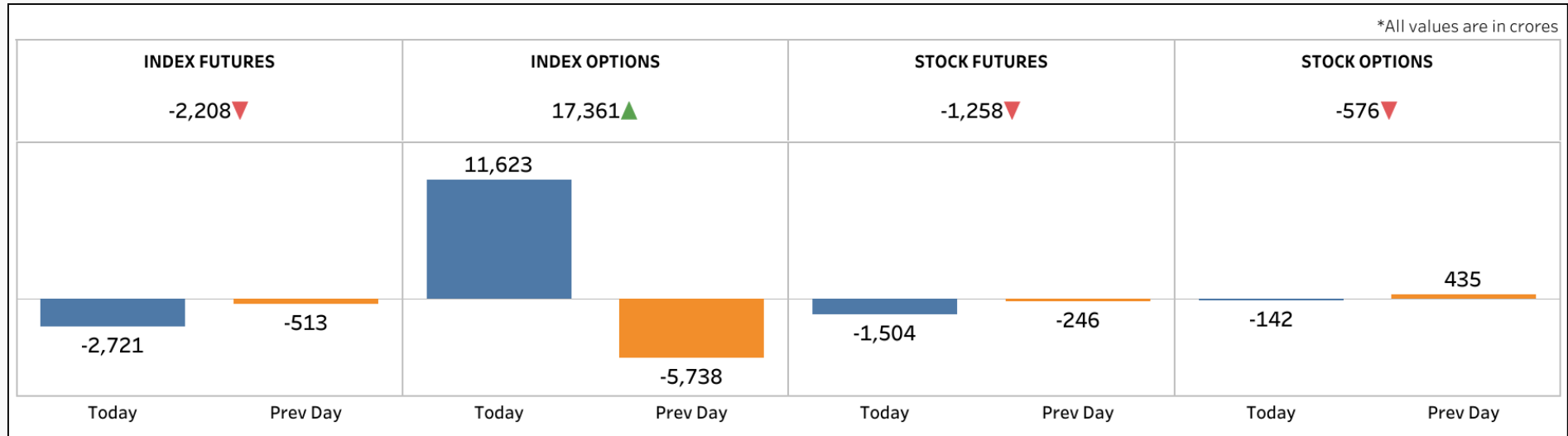
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

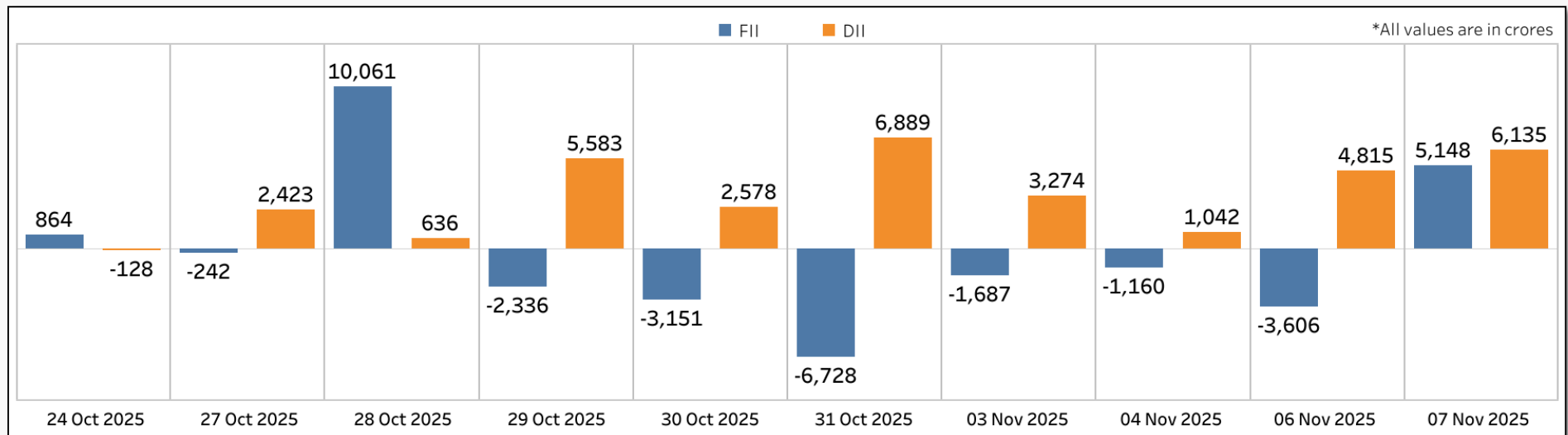
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
63,453 ▲	-11,601 ▼	30,725 ▲	-13,304 ▼	118 ▲	-1,459 ▼	-17,400 ▼	3,269 ▲
31,940		31,615		118	0	1,181	0
							
Net O/S 11,608 Today Prev Day	Net O/S -152,091 Today Prev Day	Net O/S 275,667 Today Prev Day	Net O/S 1,263,095 Today Prev Day	Net O/S 1,381 Today Prev Day	Net O/S 38,941 Today Prev Day	Net O/S 20,927 Today Prev Day	Net O/S -4,427,433 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-41,909 ▼	11,080 ▲	97,138 ▲	9,292 ▲	-21,662 ▼	1,980 ▲	-110,463 ▼	743 ▲
		61,778		29,671	51,333		
							
Net O/S -15,298 Today Prev Day	Net O/S 109,095 Today Prev Day	Net O/S -402,305 Today Prev Day	Net O/S 2,610,689 Today Prev Day	Net O/S 2,309 Today Prev Day	Net O/S 4,055 Today Prev Day	Net O/S 105,711 Today Prev Day	Net O/S 553,649 Today Prev Day

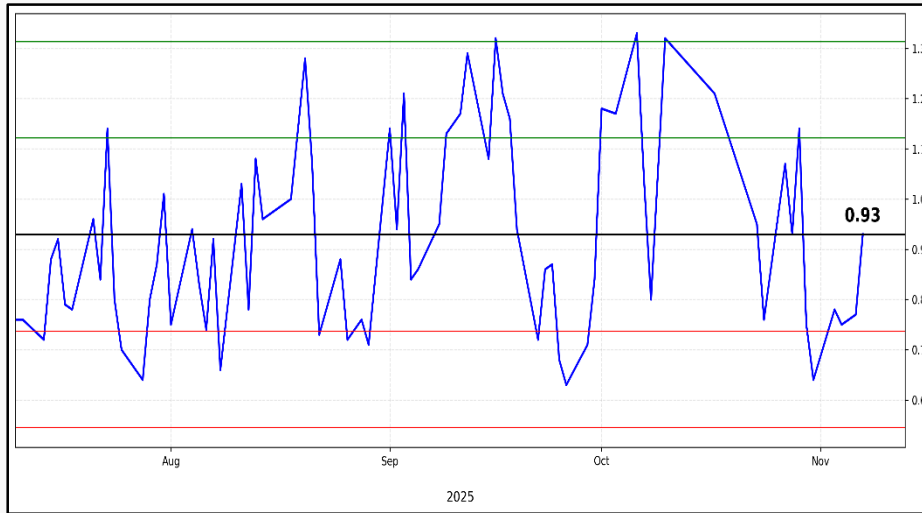
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



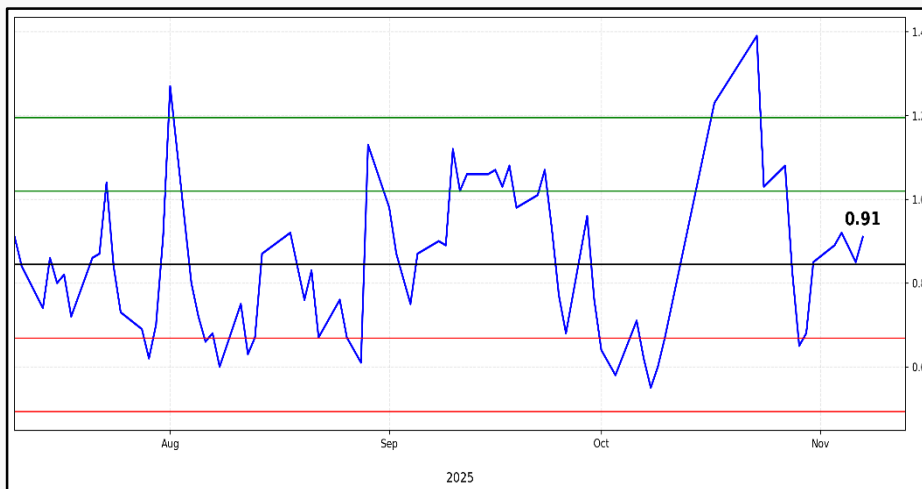
Nifty



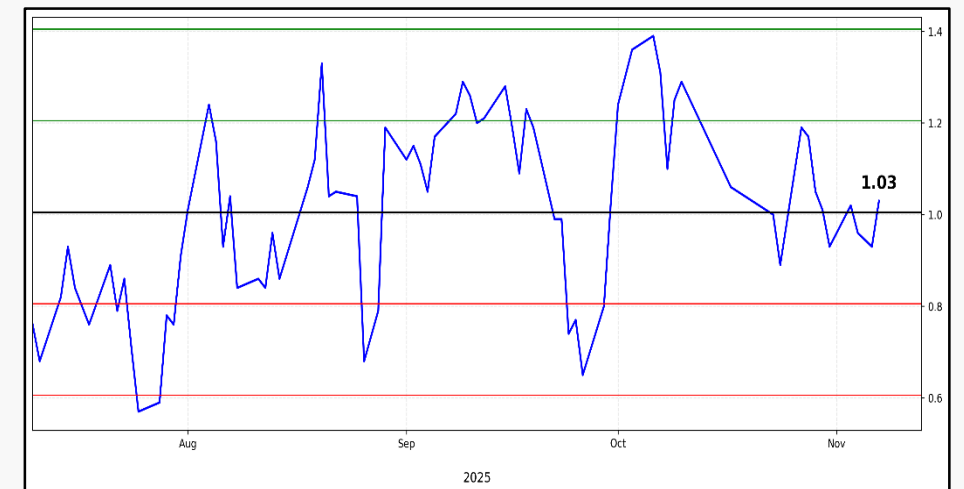
Bank Nifty



Fin Nifty

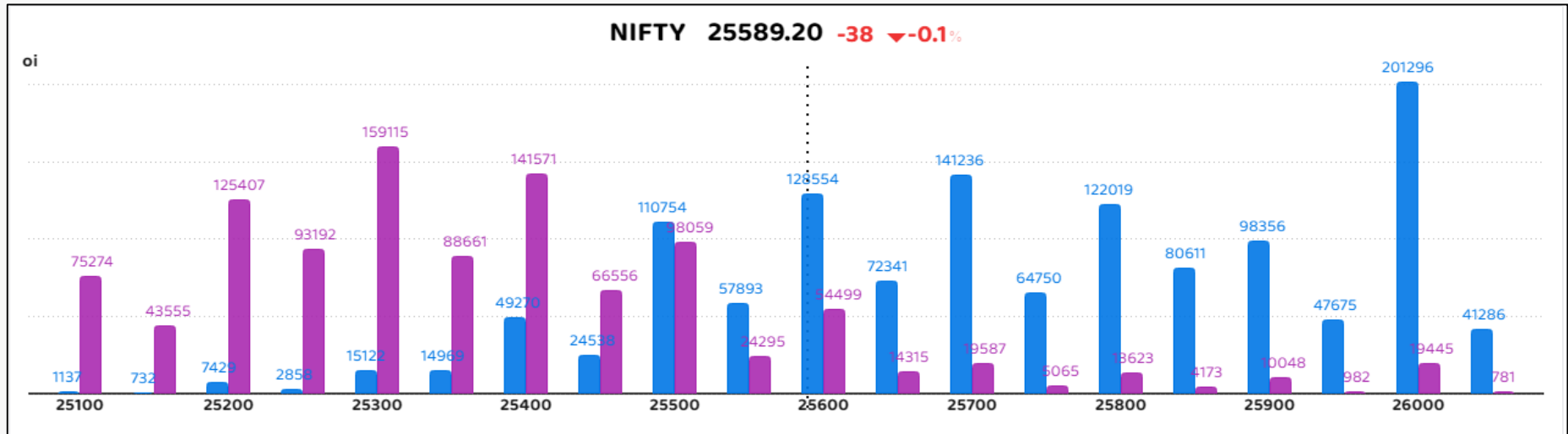


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 25,300 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.

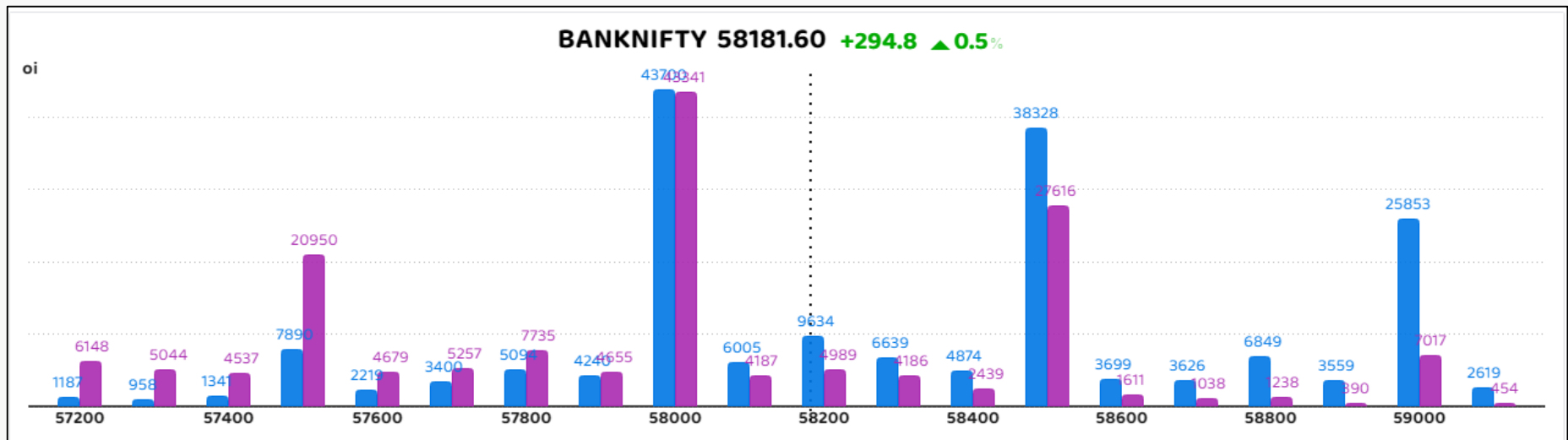
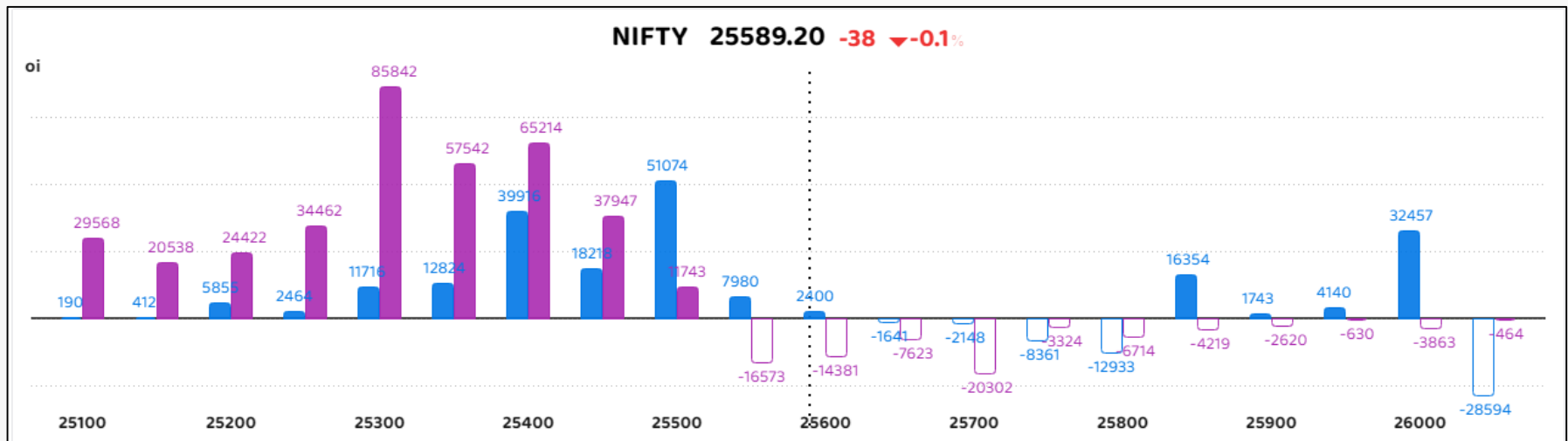


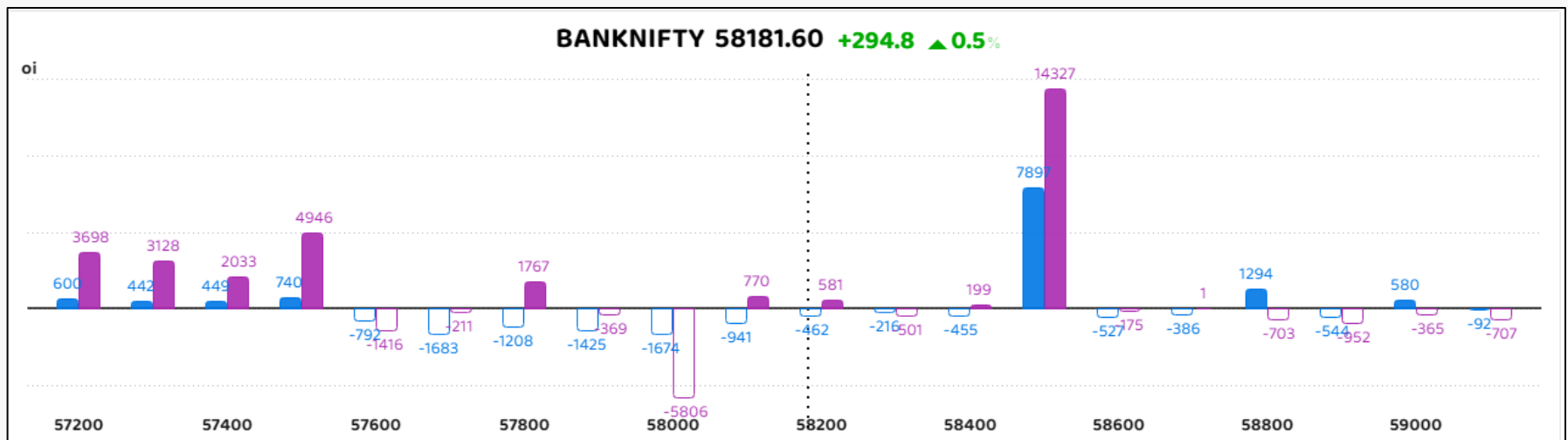
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,600 Call and the 25,300 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	36810.0	-0.6	25.6	36.2	2.1	68.9
VOLTAS LTD	1321.5	2.3	36.4	46.9	16.9	64.8
HDFC BANK LTD	982.3	-0.2	16.8	28.0	1.5	57.8
TATA CONSUMER PR	1167.2	-2.0	21.5	34.4	5.5	55.3
PI INDUSTRIES	3758.3	0.2	28.6	40.3	14.3	54.9

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
STATE BANK IND	955.9	-0.5	5.1	39.0	5.1	0.0
MAHINDRA & MAHIN	3690.2	2.0	23.0	43.5	23.0	0.0
HDFC LIFE INSURA	749.3	1.8	18.6	80.6	18.2	0.8
SRF LTD	2896.8	-0.1	22.3	40.1	22.1	1.4
GODREJ PROPERTIE	2142.7	-2.3	29.1	53.2	28.7	1.8

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
FORTIS HEALTHCAR	1020	1.0	30.7	36.0	21.3	91.1
BAJAJ FINANCE LT	1066.6	2.4	26.9	34.0	21.0	81.1
VOLTAS LTD	1321.5	2.3	36.4	46.9	16.9	73.6
MUTHOOT FINANCE	3230	1.5	32.1	49.6	21.8	69.6
ASIAN PAINTS LTD	2613.8	0.4	22.1	29.4	16.8	69.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STATE BANK IND	955.9	-0.5	5.1	39.0	5.1	0.0
MAHINDRA & MAHIN	3690.2	2.0	23.0	43.5	23.0	0.0
PHOENIX MILLS	1773.3	1.6	26.6	64.3	26.5	0.6
VODAFONE IDEA LT	9.6	3.7	18.2	212.9	14.5	0.6
LODHA DEVELOPERS	1226.6	-0.5	28.5	57.6	28.1	0.7

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
NBCC	113.4	1.7	8,226	1,775	4.6
MAXHEALTH	1,135.3	0.9	6,848	1,624	4.2
SRF	2,896.8	-0.1	9,447	2,323	4.1
YESBANK	22.8	1.0	10,426	2,645	3.9
POWERGRID	272.0	0.7	18,050	4,699	3.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
CYIENT	1,112.7	-2.6	5,615	6,725	1.2
PGEL	528.3	-4.0	15,849	17,993	1.1
FEDERALBNK	237.3	0.6	7,787	7,930	1.0
PERSISTENT	5,781.0	-1.0	7,267	6,870	0.9
LTIM	5,567.5	-1.5	4,329	4,053	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
AMBER	7,227.0	-7.7	18,843	10,859	100.0
BANDHANBNK	153.7	0.5	22,690	22,638	100.0
BEL	414.2	1.3	50,288	50,248	100.0
BLUESTARCO	1,752.7	-1.8	8,160	5,997	100.0
INDIANB	874.0	0.9	5,754	5,691	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
AMBER	7,227.0	-7.7	8,280	6,853	100.0
HINDALCO	790.4	0.3	23,431	21,853	100.0
LTF	303.6	10.3	9,933	8,471	100.0
SHRIRAMFIN	816.4	3.0	21,562	17,841	100.0
CROMPTON	277.2	-0.5	7,435	7,610	97.7

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
AMBER	7,227.0	-7.7	1,54,284	57,588	100.0
LTF	303.6	10.3	65,139	43,087	100.0
CUMMINSIND	4,291.8	-0.6	85,261	1,37,156	62.2
BLUESTARCO	1,752.7	-1.8	18,895	30,922	61.1
UNOMINDA	1,229.7	-0.3	14,706	24,909	59.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
AMBER	7,227.0	-7.7	70,700	29,169	100.0
LTF	303.6	10.3	43,220	27,761	100.0
UNOMINDA	1,229.7	-0.3	7,789	9,227	84.4
CUMMINSIND	4,291.8	-0.6	37,216	49,372	75.4
BHARTIARTL	2,001.2	-4.5	87,646	1,25,628	69.8

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BLUESTARCO	1,752.7	-1.8	8,160	1,819	4.5
AMBER	7,227.0	-7.7	18,843	5,124	3.7
POWERINDIA	20,863.0	3.2	4,969	1,458	3.4
DELHIVERY	429.6	-2.9	12,226	4,249	2.9
HINDALCO	790.4	0.3	36,792	14,386	2.6

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POWERINDIA	20,863.0	3.2	5,280	831	6.4
AMBER	7,227.0	-7.7	8,280	2,934	2.8
BLUESTARCO	1,752.7	-1.8	2,536	1,051	2.4
SHRIRAMFIN	816.4	3.0	21,562	9,932	2.2
NCC	195.3	-0.1	3,008	1,551	1.9

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
AMBER	7,227.0	-7.7	1,54,284	10,075	15.3
LICI	924.2	3.1	83,534	6,862	12.2
CUMMINSIND	4,291.8	-0.6	85,261	10,569	8.1
LTF	303.6	10.3	65,139	8,517	7.6
LUPIN	1,971.8	0.8	81,683	12,001	6.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AMBER	7,227.0	-7.7	70,700	3,484	20.3
LICI	924.2	3.1	27,818	2,531	11.0
CUMMINSIND	4,291.8	-0.6	37,216	4,431	8.4
LTF	303.6	10.3	43,220	5,243	8.2
ABB	5,016.5	-4.0	34,783	4,974	7.0

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	2500	2233500	5.5%	2369	2500	2481300	5.5%	JIOFIN	310	10119100	3.6%	299	310	6138200	3.6%
ADANIPTS	1460	1707150	0.8%	1448	1400	1225975	-3.3%	JSWSTEEL	1340	1129275	14.4%	1172	1100	625050	-6.1%
APOLLOHOSP	8000	243250	4.7%	7642	7500	91875	-1.9%	KOTAKBANK	2200	2078400	5.3%	2088	2100	921600	0.6%
ASIANPAINT	2600	892000	-0.5%	2614	2600	526000	-0.5%	LT	4000	1135225	3.0%	3883	3900	426300	0.5%
AXISBANK	1300	1597500	6.3%	1223	1140	1016875	-6.8%	M&M	3700	628200	0.3%	3690	3600	620800	-2.4%
BAJAJ-AUTO	9000	232575	3.2%	8722	8000	108900	-8.3%	MARUTI	17000	493450	9.8%	15479	15500	147950	0.1%
BAJAJFINSV	2200	553250	4.7%	2102	1880	377500	-10.6%	MAXHEALTH	1200	558075	5.7%	1135	1200	216825	5.7%
BAJFINANCE	1100	2082750	3.1%	1067	1050	1330500	-1.6%	NESTLEIND	1300	2081500	3.0%	1263	1200	235500	-5.0%
BEL	420	10901250	1.4%	414	400	4558575	-3.4%	NTPC	350	8866500	7.3%	326	300	2745000	-8.0%
BHARTIARTL	2100	5428300	4.9%	2001	2000	1546125	-0.1%	ONGC	260	10271250	3.1%	252	250	1917000	-0.9%
CIPLA	1600	1896375	6.3%	1506	1500	618375	-0.4%	POWERGRID	300	7512600	10.3%	272	270	2869000	-0.7%
COALINDIA	389.75	6266700	3.7%	376	369.75	2404350	-1.7%	RELIANCE	1500	11207000	1.5%	1478	1500	4691500	1.5%
DRREDDY	1300	3143750	7.8%	1205	1200	732500	-0.4%	SBILIFE	2020	1338000	1.1%	1999	1900	821250	-4.9%
EICHERMOT	7000	206325	1.7%	6886	6200	214900	-10.0%	SBIN	970	4791750	1.5%	956	900	4442250	-5.8%
ETERNAL	330	13948600	7.8%	306	310	4956700	1.3%	SHRIRAMFIN	800	1969275	-2.0%	816	800	2501400	-2.0%
GRASIM	3000	1041750	10.1%	2725	2800	261000	2.8%	SUNPHARMA	1720	803950	1.7%	1691	1660	484050	-1.9%
HCLTECH	1600	817250	5.8%	1512	1400	1026200	-7.4%	TATACONSUM	1200	904200	2.8%	1167	1160	477950	-0.6%
HDFCBANK	1000	8120200	1.8%	982	1000	2759350	1.8%	TMPV	420	4576800	3.5%	406	400	2585600	-1.4%
HDFCLIFE	750	1907400	0.1%	749	750	971300	0.1%	TATASTEEL	185	24810500	2.0%	181	180	12683000	-0.8%
HINDALCO	800	3307500	1.2%	790	800	2510200	1.2%	TCS	3100	2453850	3.6%	2992	3000	1042125	0.3%
HINDUNILVR	2600	2226600	7.7%	2414	2500	709200	3.6%	TECHM	1500	1038600	8.2%	1387	1300	525000	-6.3%
ICICIBANK	1400	9098600	4.2%	1343	1400	2961700	4.2%	TITAN	3800	596750	0.8%	3769	3700	420350	-1.8%
INDIGO	5800	344250	3.9%	5584	5600	292950	0.3%	TRENT	5000	562100	8.1%	4627	4600	293700	-0.6%
INFY	1500	4834000	1.6%	1477	1500	2239600	1.6%	ULTRACEMCO	12500	115850	5.5%	11849	11000	59800	-7.2%
ITC	420	9324800	3.9%	404	410	3451200	1.5%	WIPRO	250	14325000	5.7%	236	240	5892000	1.5%

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

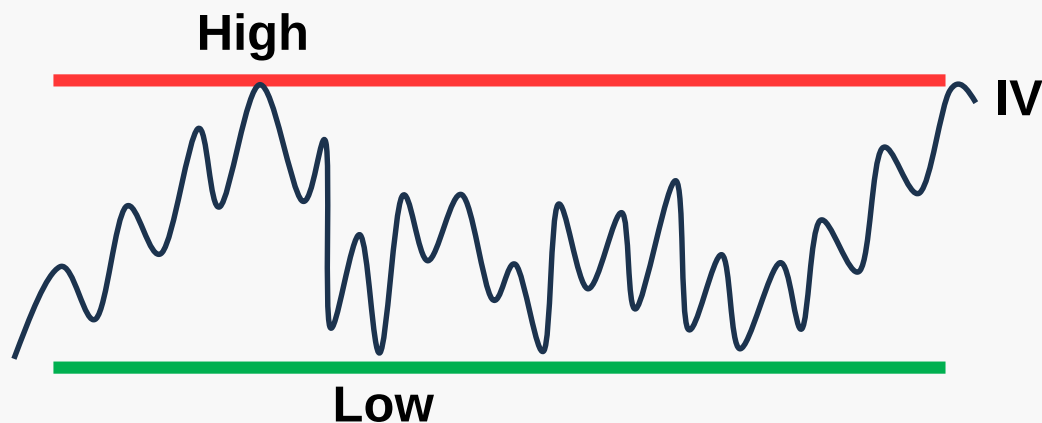
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

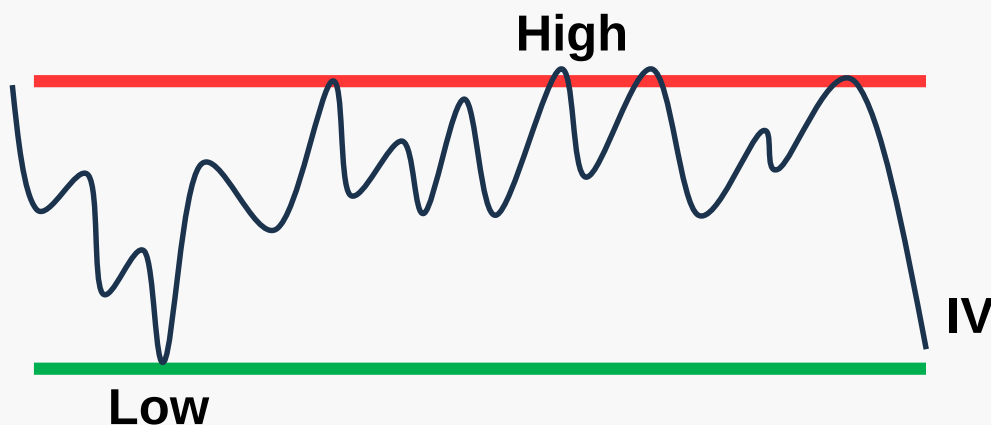
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

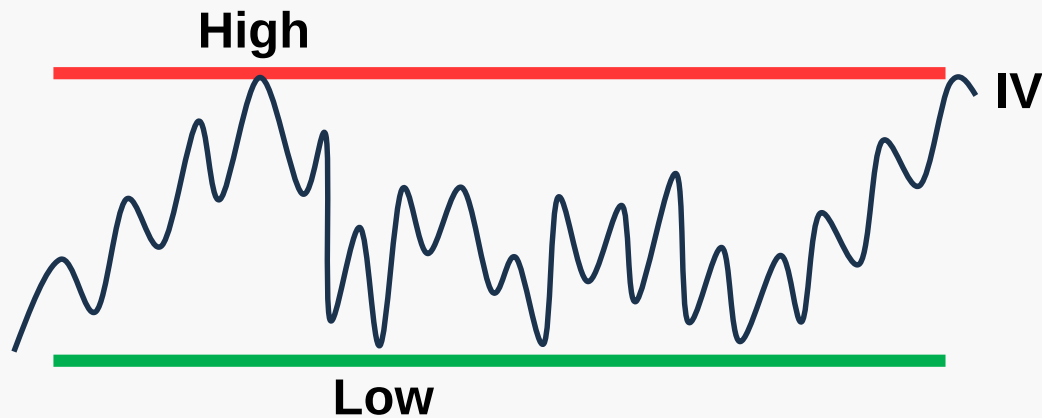


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

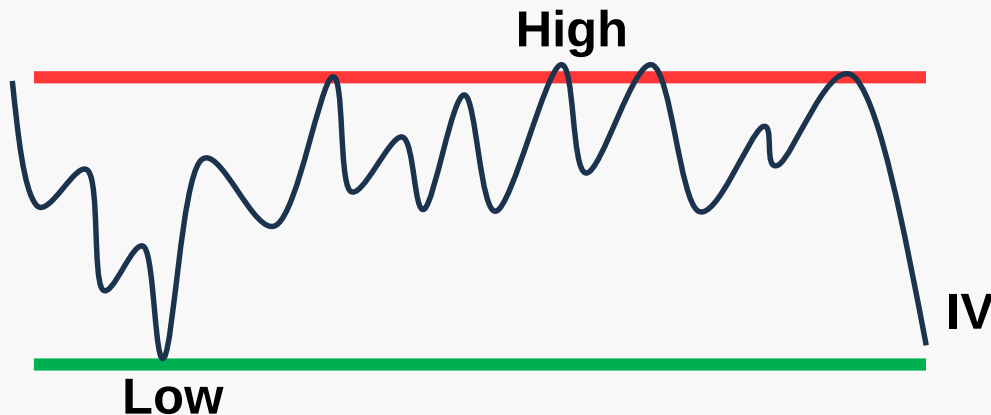


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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