



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,206	0.4%▼
Open Interest (OI)	1,95,94,950	3.7%▲
Change in OI (abs)	1,95,94,950	6,95,700▲
Premium / Discount (Abs)	61	37▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	56,716	0.3%▼
Open interest (OI)	19,00,745	4.5%▼
Change in OI (abs)	19,00,745	89,845▼
Premium / Discount (Abs)	220	26▼
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	11.15	0.14▲
Nifty ATM IV (%)	10.34	0.5▲
Bank Nifty ATM IV (%)	11.55	0.4▲
PCR (Nifty)	0.91	0.14▼
PCR (Bank Nifty)	1.00	0.13▼

The FII Long Ratio in Index Futures **drop** to 7.1 %, **down** from 7.3 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IREDA	4,85,20,800	11.8%	154.66	3.0%
MCX	28,75,375	9.4%	9422	4.9%
ICICIPRULI	1,20,00,950	5.2%	600	0.8%
FEDERALBNK	9,83,70,000	4.7%	216.19	1.3%
BIOCON	4,50,85,000	4.5%	352.95	0.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
AMBER	6,44,800	9.7%	8122	-1.4%
PPLPHARMA	2,21,17,500	9.1%	192.22	-2.9%
BANDHANBNK	10,40,04,000	6.6%	163.18	-3.5%
POWERINDIA	72,150	6.4%	17506	-1.9%
NCC	1,96,12,800	6.3%	204.18	-2.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	40,13,500	-6.9%	2391	1.9%
TORNTPOWER	39,66,750	-6.3%	1296.4	0.8%
RBLBANK	7,23,07,450	-6.2%	292.6	0.6%
TECHM	1,61,87,400	-4.3%	1460.4	1.0%
PHOENIXLTD	39,24,900	-3.4%	1627.2	0.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TATAMOTORS	2,32,98,400	-15.3%	395.9	-40.1%
KFINTECH	22,85,100	-9.4%	1110.2	-3.4%
PGEL	1,02,07,400	-8.2%	569.5	-2.7%
UNOMINDA	38,91,800	-6.0%	1189.6	-3.9%
INDIANB	74,35,000	-5.5%	770.85	-1.4%

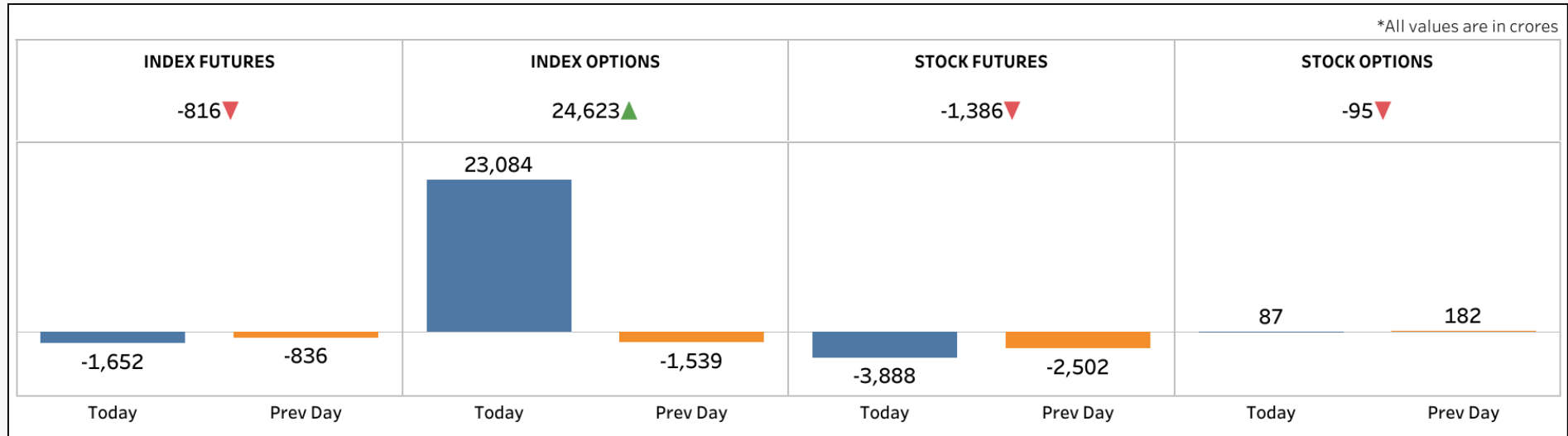
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

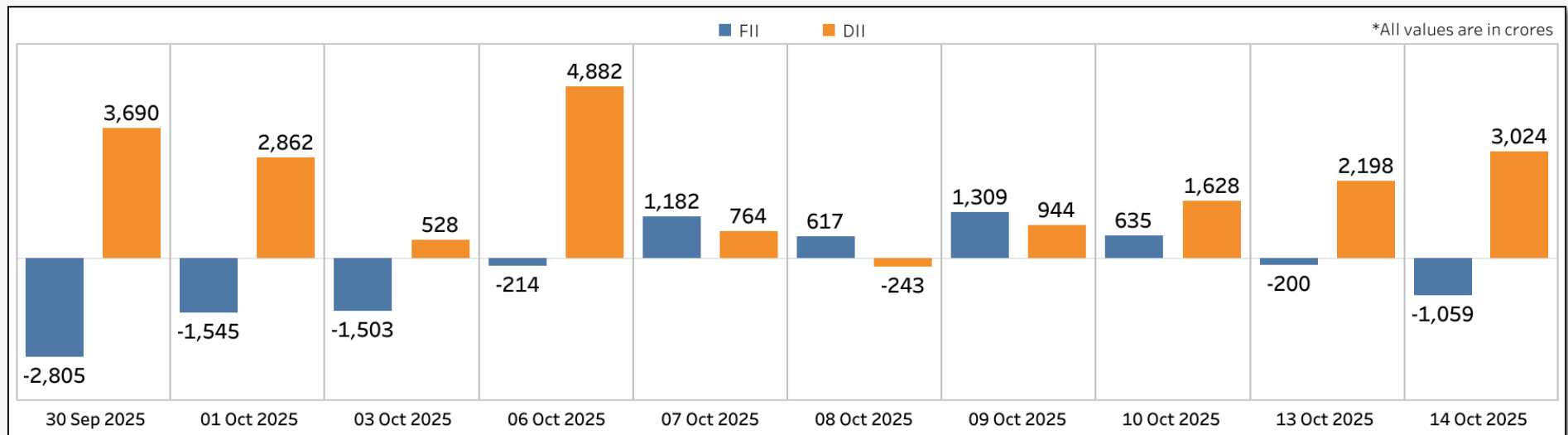
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
52,316 ▲	-4,301 ▼	-65,723 ▼	-11,688 ▼	0	-6,469 ▼	800 ▲	-31,504 ▼
4,352		38,398					51,820
-47,964	-8,671	-27,325	-64,914	0	-3,331	-800	20,316
	-4,370		-53,226		3,138	-1,600	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-31,163	-194,380	291,407	1,153,719	11,153	44,497	28,520	-4,082,023
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
4,492 ▲	-7,713 ▼	177,434 ▲	19,240 ▲	-56,808 ▼	18,483 ▲	-112,511 ▼	23,952 ▲
102,067		49,427	18,419		10,755	91,208	26,179
97,575	1,247		-821	-49,610	-7,728	-21,303	2,227
	8,960	-128,007		-106,418			
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
54,031	136,465	-403,802	2,406,936	-34,020	13,418	83,874	521,368
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

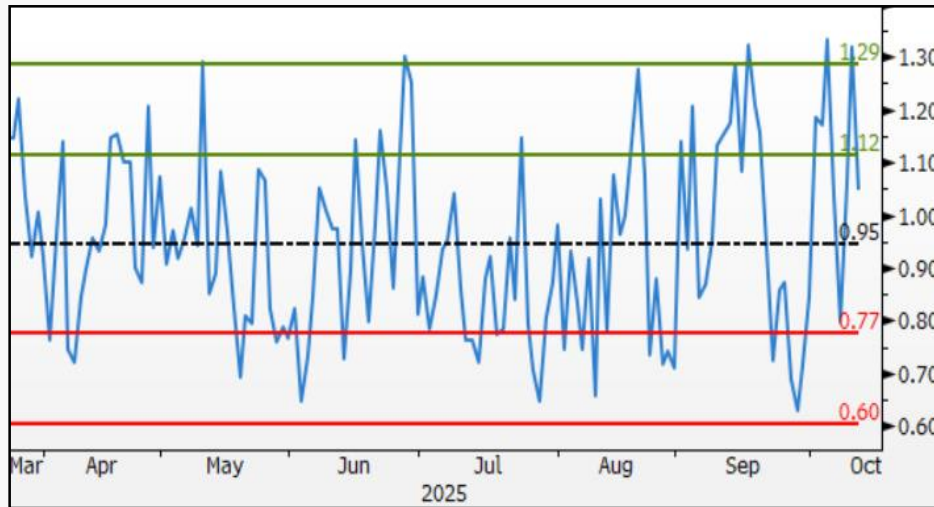
Daily Net Open Interest Change



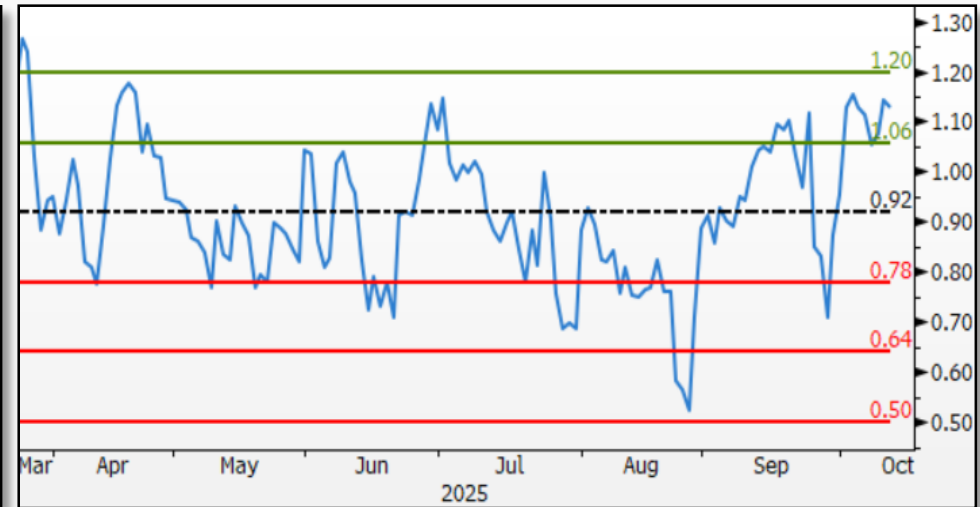
DII and FII Daily Cash Market Flows



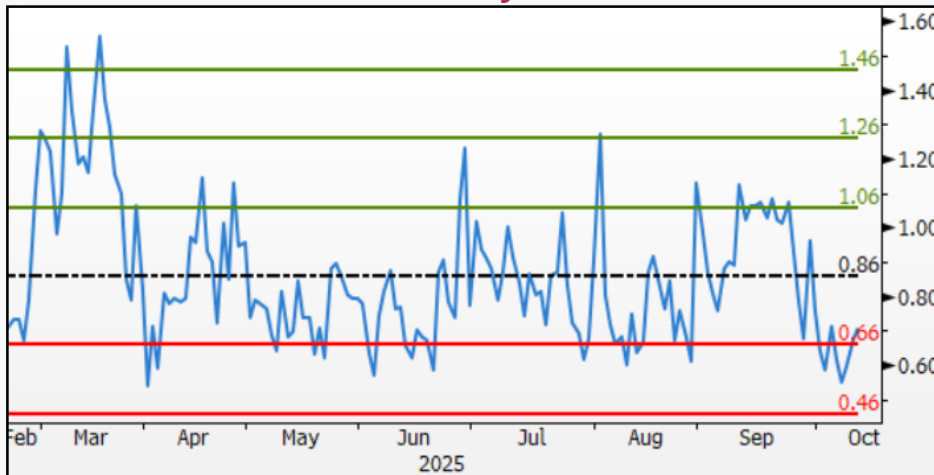
Nifty



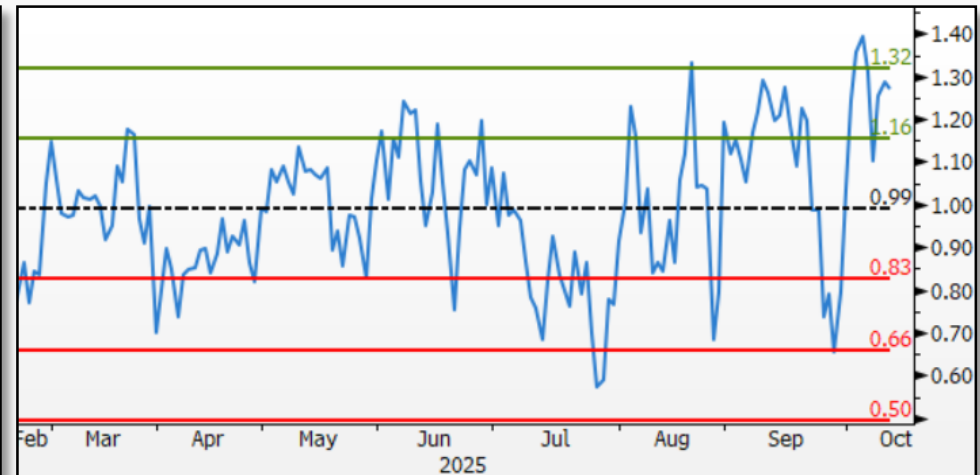
Bank Nifty



Fin Nifty

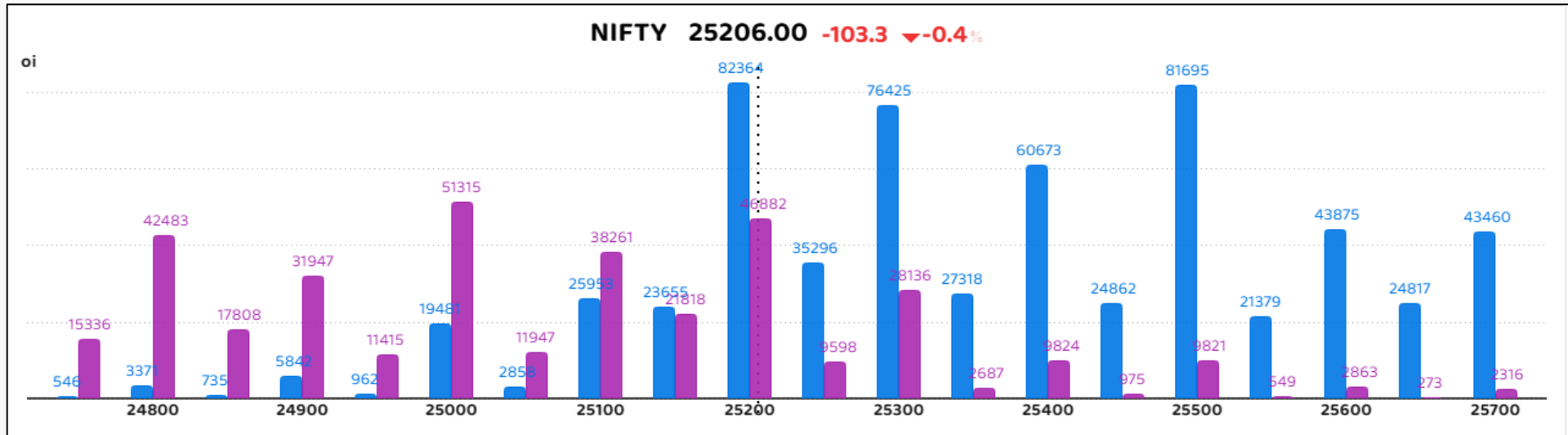


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,200 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 57,000 Put saw the most amount of open interest.

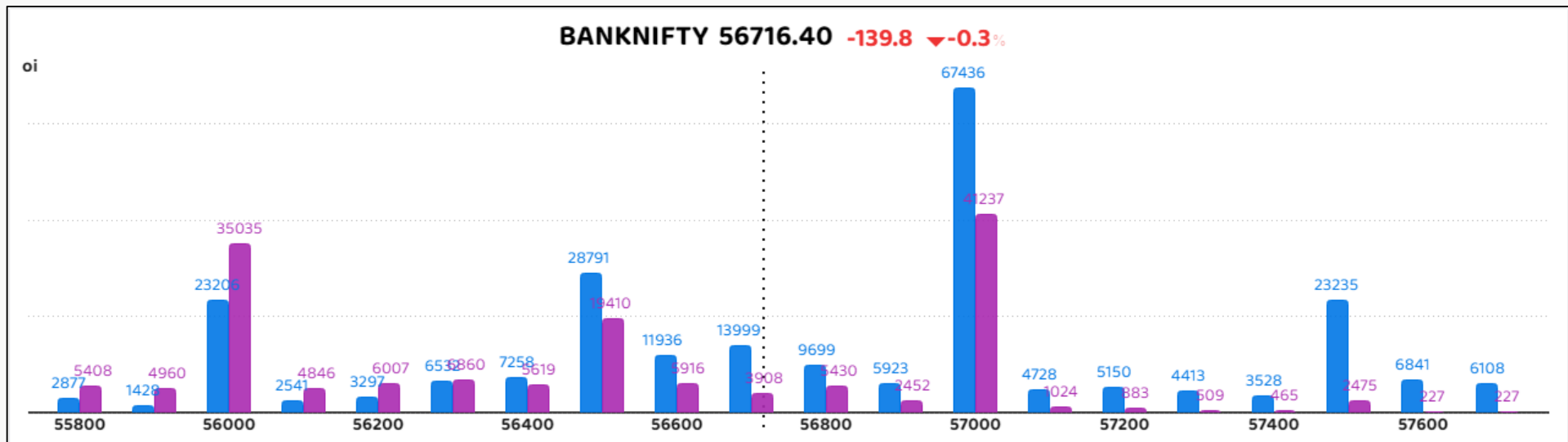
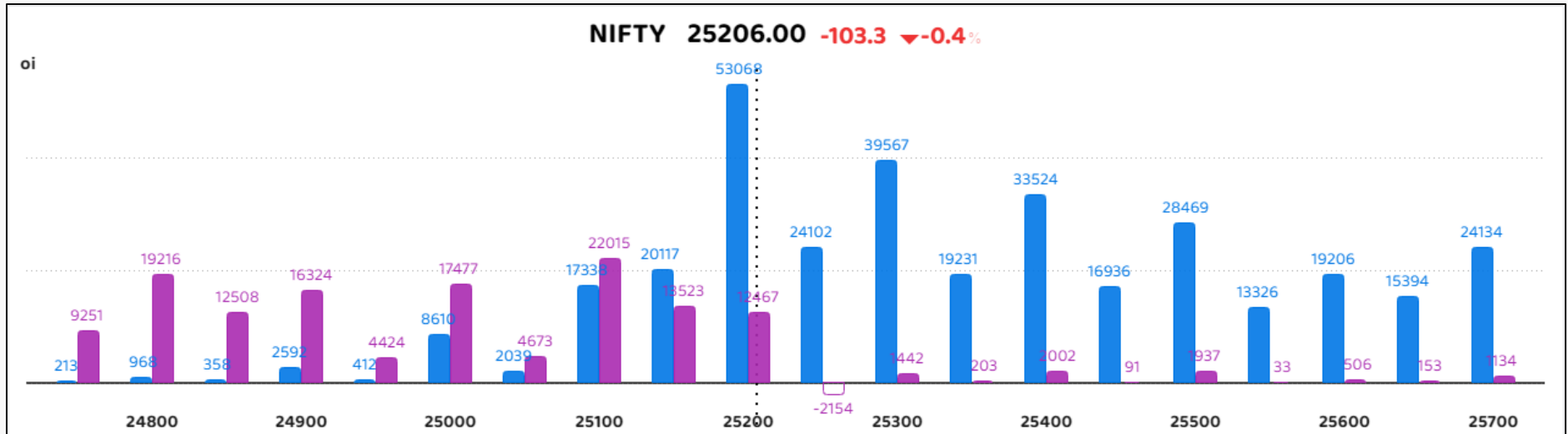


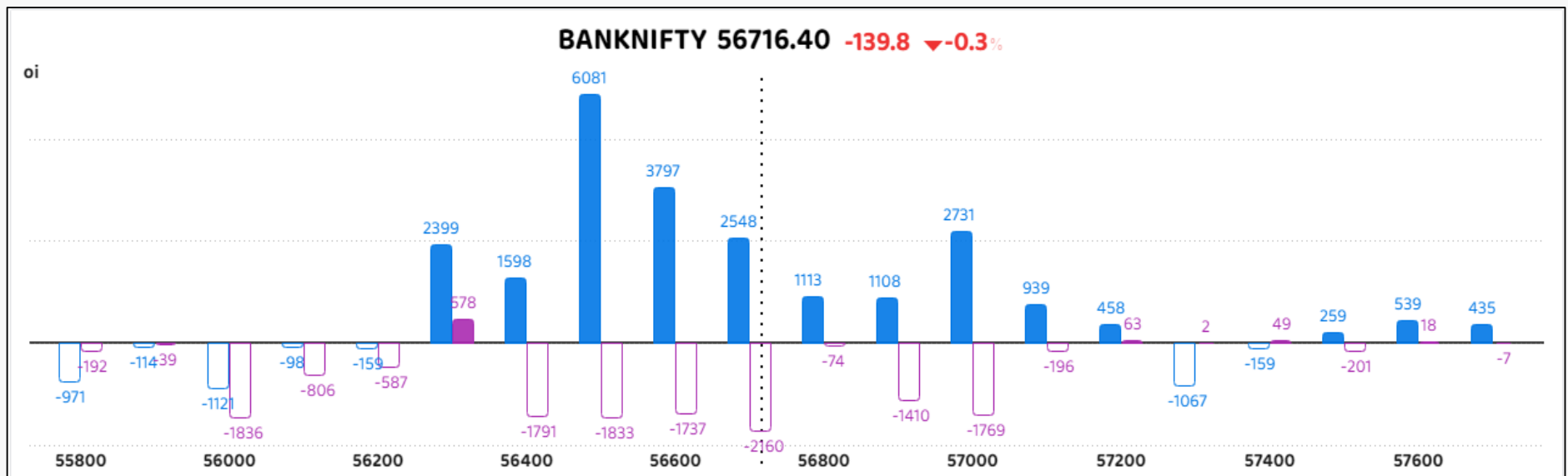
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,200 Call and the 25,100 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 56,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TVS MOTOR CO LTD	3505		41.9	41.9	20.1	100.0
BAJAJ AUTO LTD	9102.5		25.4	36.4	2.1	68.0
SYNGENE INTERNAT	625.65		30.9	38.7	15.6	66.2
LTIMINDTREE LTD	5469		30.6	43.3	6.7	65.4
TATA MOTORS PASS	395.45		46.7	72.5	1.3	63.8

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NTPC LTD	336.65		20.3	116.6	16.6	3.7
INTERGLOBE AVIAT	5759		21.8	43.1	20.9	4.1
ADANI PORTS AND	1429		24.5	99.6	19.7	5.9
GAIL INDIA LTD	175.37		26.9	91.4	22.4	6.5
POWER FINANCE	398		25.8	51.5	23.7	7.4

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TVS MOTOR CO LTD	3505	0.1	41.9	41.9	20.1	100
TATA MOTORS	395.45	-0.9	46.7	72.5	1.3	98.6
INFOSYS LTD	1489.9	-0.2	29.2	60.7	3.3	90.0
PIRAMAL PHARMA L	192.26	-2.7	37.1	40.1	27.2	86.5
GODREJ CONSUMER	1101.4	-0.9	28.1	38.0	18.7	82.6

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI BANK LTD	1384.1	0.3	5.1	46.1	0.4	0.9
RBL BANK LTD	291.5	0.5	23.5	71.4	10.6	4.3
HINDUSTAN AERONA	4746.8	0.0	25.2	51.6	8.3	4.7
FSN E-COMMERCE V	255.79	-2.2	29.0	51.1	22.8	5.7
INTERGLOBE AVIAT	5759	-0.5	21.9	43.2	21.0	6.5

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGEIND	40,470.0	2.5	10,882	1,576	6.9
TITAGARH	883.1	0.5	7,792	1,470	5.3
LODHA	1,141.9	0.4	9,922	2,029	4.9
SUZLON	54.0	-1.3	8,349	1,850	4.5
INDHOTEL	721.2	-0.9	16,531	3,791	4.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALBHARAT	2,213.0	-2.2	2,756	3,021	0.9
IIFL	485.2	2.3	3,981	5,203	0.8
OFSS	8,949.9	-1.7	7,638	10,083	0.8
RECLTD	370.3	0.4	12,614	16,767	0.8
KOTAKBANK	2,151.8	-0.3	14,192	18,888	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES	6,911.0	-0.8	22,834	22834	100
CROMPTON	280.1	0.3	12,029	12029	100
UNOMINDA	1,185.4	-1.7	7,036	7036	100
RVNL	333.0	-1.1	15,721	15727	100
TATAELXSI	5,334.8	1.4	20,513	21009	97.6

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
DIVISLAB	6,561.0	-0.8	17,545	17545	100
KAYNES	6,911.0	-0.8	9,931	9931	100
PPLPHARMA	192.2	0.8	3,256	3256	100
SUZLON	54.0	-1.3	9,029	9443	95.6
MAXHEALTH	1,161.5	-0.1	5,282	5571	94.8

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
HINDZINC	505.6	2.9	76,293	108867	70.1
KFINTECH	1,111.2	-1.3	13,449	19696	68.3
IREDA	154.5	-1.3	69,912	128960	54.2
HCLTECH	1,495.4	1.6	1,81,532	337513	53.8
ANGELONE	2,404.6	-0.9	74,247	145630	51

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
UNOMINDA	1,185.4	-1.7	5,580	9227	60.5
HINDZINC	505.6	2.9	28,603	48254	59.3
IREDA	154.5	-1.3	20,886	40400	51.7
HCLTECH	1,495.4	1.6	90,699	190570	47.6
GAIL	175.4	-1.5	17,957	38653	46.5

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
UNOMINDA	1,185.4	-1.7	7,036	2,953	2.4
KAYNES	6,911.0	-0.8	22,834	11,026	2.1
DMART	4,205.2	-3.1	26,557	13,097	2.0
HCLTECH	1,495.4	1.6	39,316	19,470	2.0
TATAELXSI	5,334.8	1.4	20,513	10,510	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
DIVISLAB	6,561.0	-0.8	17,545	7,734	2.3
MCX	9,397.7	2.3	21,023	11,377	1.8
FORTIS	1,081.4	1.5	4,382	2,486	1.8
UNOMINDA	1,185.4	-1.7	3,166	1,804	1.8
TATAELXSI	5,334.8	1.4	7,944	4,657	1.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PG ELECTROPLAST	506.0		151572	15827	9.6
VOLTAS LTD	1245.2		68619	10868	6.3
SIEMENS LTD	3114.8		91617	19567	4.7
INDIAN BANK	674.0		16389	4133	4
PB FINTECH LTD	1860.6		18384	4938	3.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PG ELECTROPLAST	506.0		90426	8461	10.7
VOLTAS LTD	1245.2		64036	7646	8.4
TITAGARH RAIL SY	776.2		13280	2120	6.3
SIEMENS LTD	3114.8		55956	8963	6.2
AMBER ENTERPRISE	6912.5		29169	5285	5.5

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	2600	2252700	3.3%	2517	2500	714000	-0.7%	JIOFIN	320	10528000	4.7%	306	300	7007700	-1.8%
ADANIPTS	1440	1383200	0.8%	1429	1400	1393175	-2.0%	JSWSTEEL	1300	992250	13.3%	1148	1100	627750	-4.2%
APOLLOHOSP	7800	138000	0.5%	7759	7700	64125	-0.8%	KOTAKBANK	2100	999600	-2.4%	2152	2100	1458400	-2.4%
ASIANPAINT	2500	1207250	7.8%	2318	2300	533250	-0.8%	LT	3800	1393700	1.5%	3744	3700	407750	-1.2%
AXISBANK	1200	4100000	2.0%	1177	1130	1500000	-4.0%	M&M	3600	1229200	4.1%	3460	3400	524000	-1.7%
BAJAJ-AUTO	9500	212700	4.4%	9103	8800	117225	-3.3%	MARUTI	17000	385200	4.5%	16261	15000	259400	-7.8%
BAJAJFINSV	2100	700500	4.0%	2019	1800	649500	-10.9%	MAXHEALTH	1200	857325	3.3%	1162	1060	419475	-8.7%
BAJFINANCE	1100	2317500	7.9%	1019	1020	1303500	0.1%	NESTLEIND	1200	922500	2.1%	1176	1180	441000	0.4%
BEL	420	11679300	4.4%	402	410	5645850	1.9%	NTPC	345	9321000	2.5%	337	380	1824000	12.9%
BHARTIARTL	1960	3802850	0.7%	1947	1900	931000	-2.4%	ONGC	250	18708750	2.2%	245	240	2715750	-1.9%
CIPLA	1700	1143375	9.5%	1552	1460	320625	-5.9%	POWERGRID	300	6976800	4.3%	288	280	1920900	-2.6%
COALINDIA	390	4546800	2.4%	381	380	2465100	-0.2%	RELIANCE	1400	10651000	1.8%	1376	1400	3995500	1.8%
DRREDDY	1320	1019375	6.7%	1237	1240	400625	0.2%	SBILIFE	1800	581250	-0.9%	1816	1800	197625	-0.9%
EICHERMOT	7000	415275	1.6%	6887	6500	207375	-5.6%	SBIN	900	7273500	2.6%	877	820	2550750	-6.5%
ETERNAL	335	10340200	-3.7%	348	330	6700275	-5.1%	SHRIRAMFIN	680	1219350	0.8%	674	660	963600	-2.1%
GRASIM	2900	363250	4.5%	2776	2700	143500	-2.7%	SUNPHARMA	1680	1499050	1.5%	1654	1500	639450	-9.3%
HCLTECH	1520	2554300	1.6%	1495	1500	910000	0.3%	TATACONSUM	1200	435050	7.2%	1119	1100	200750	-1.7%
HDFCBANK	1000	5627600	2.3%	977	980	2741200	0.3%	TATAMOTORS	420	4685600	6.2%	395	400	1592800	1.2%
HDFCLIFE	800	2072400	7.6%	744	740	842600	-0.5%	TATASTEEL	180	30629500	5.6%	171	165	10032000	-3.2%
HINDALCO	800	3726800	5.2%	760	750	1404200	-1.3%	TCS	3100	3612000	4.7%	2960	3000	1418375	1.3%
HINDUNILVR	2600	978900	3.9%	2502	2500	441000	-0.1%	TECHM	1500	1158000	2.2%	1468	1400	842400	-4.6%
ICICIBANK	1400	6063400	1.1%	1384	1400	2586500	1.1%	TITAN	3600	733075	1.8%	3537	3400	390425	-3.9%
INDIGO	5800	408450	0.7%	5759	5500	184950	-4.5%	TRENT	5000	1043300	8.3%	4617	4700	425600	1.8%
INFY	1560	12868400	4.7%	1490	1400	2559600	-6.0%	ULTRACEMCO	13000	132650	7.7%	12070	12000	54650	-0.6%
ITC	410	10235200	3.3%	397	400	5515200	0.8%	WIPRO	250	6285000	0.6%	248	245	3270000	-1.4%

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

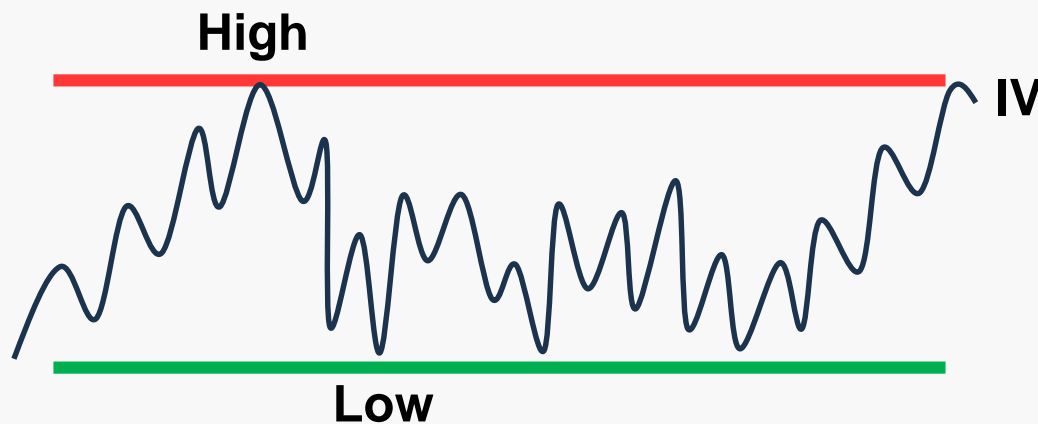
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

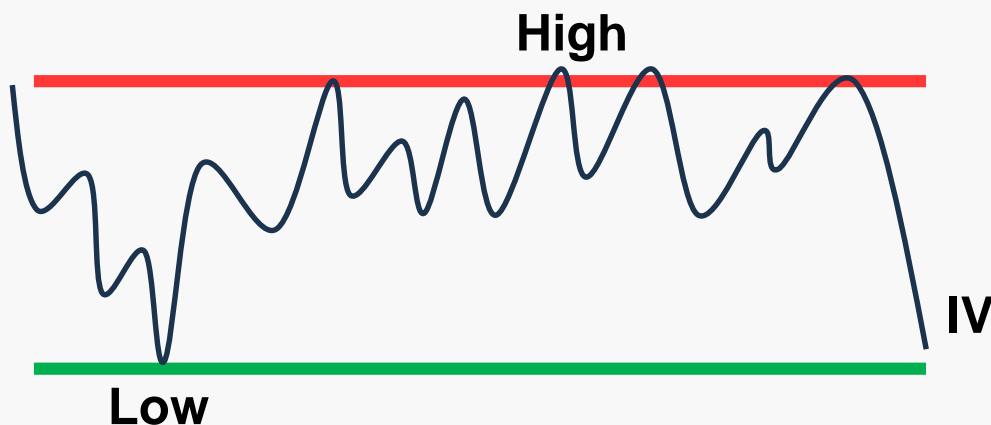
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DII)s, 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

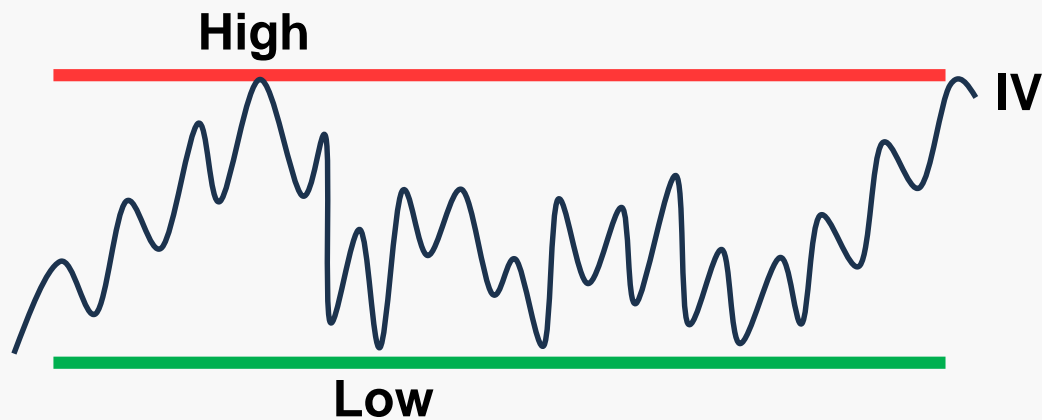


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

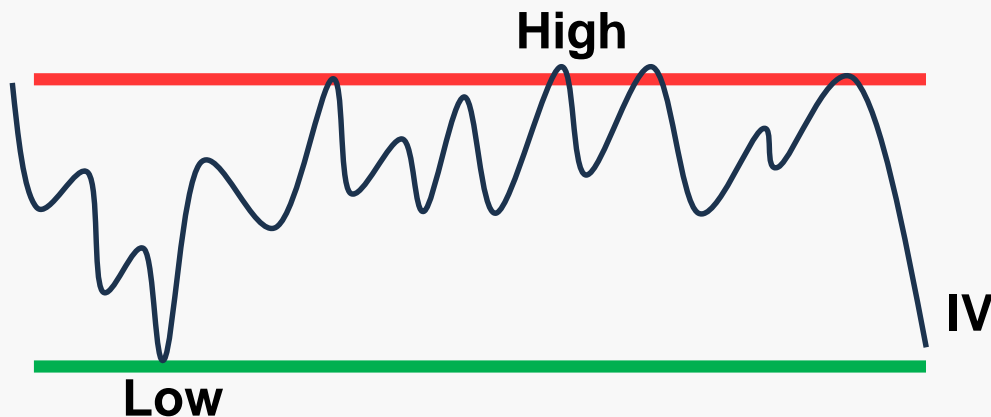


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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