



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,732	1.0% ▼
Open Interest (OI)	1,89,73,425	4.3% ▲
Change in OI (abs)	1,89,73,425	7,80,525 ▲
Premium / Discount (Abs)	19	3 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	54,526	1.3% ▼
Open interest (OI)	31,48,110	1.3% ▼
Change in OI (abs)	31,48,110	39,725 ▼
Premium / Discount (Abs)	75	44 ▼
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	12.19	0.43 ▲
Nifty ATM IV (%)	9.63	1.2 ▲
Bank Nifty ATM IV (%)	11.27	0.8 ▲
PCR (Nifty)	0.72	0.16 ▼
PCR (Bank Nifty)	0.51	0.05 ▼

The FII Long Ratio in Index Futures **jump** to 14.3 %, **up** from 13.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	7,15,65,625	14.9%	230.74	0.5%
EICHERMOT	48,07,250	12.3%	6142	2.7%
LTF	4,98,98,546	11.5%	219.8	0.7%
MARUTI	42,86,550	6.5%	14664	1.9%
BRITANNIA	35,76,000	4.9%	5757.5	3.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IREDA	4,04,54,700	16.2%	144.19	-2.7%
MUTHOOTFIN	45,13,850	9.2%	2667.6	-0.8%
SHRIRAMFIN	4,27,79,550	7.6%	595.25	-4.0%
IEX	4,66,95,000	7.4%	141.49	-1.7%
BSE	1,35,95,625	7.0%	2220.9	-3.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ATGL	13,97,375	-25.6%	637.7	0.7%
GRANULES	67,81,100	-18.8%	468.8	1.9%
ABFRL	1,59,95,200	-18.3%	82.81	1.1%
SHREECEM	2,51,025	-6.3%	30090	0.0%
ASHOKLEY	10,77,65,000	-4.8%	131.35	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CESC	49,80,750	-27.9%	162.17	-1.3%
JSL	19,36,300	-27.5%	796.8	-0.2%
PGEL	81,50,800	-21.3%	556.95	-5.0%
POONAWALLA	57,44,300	-19.3%	453.05	-3.3%
IRB	3,94,14,800	-17.2%	44.15	-2.0%

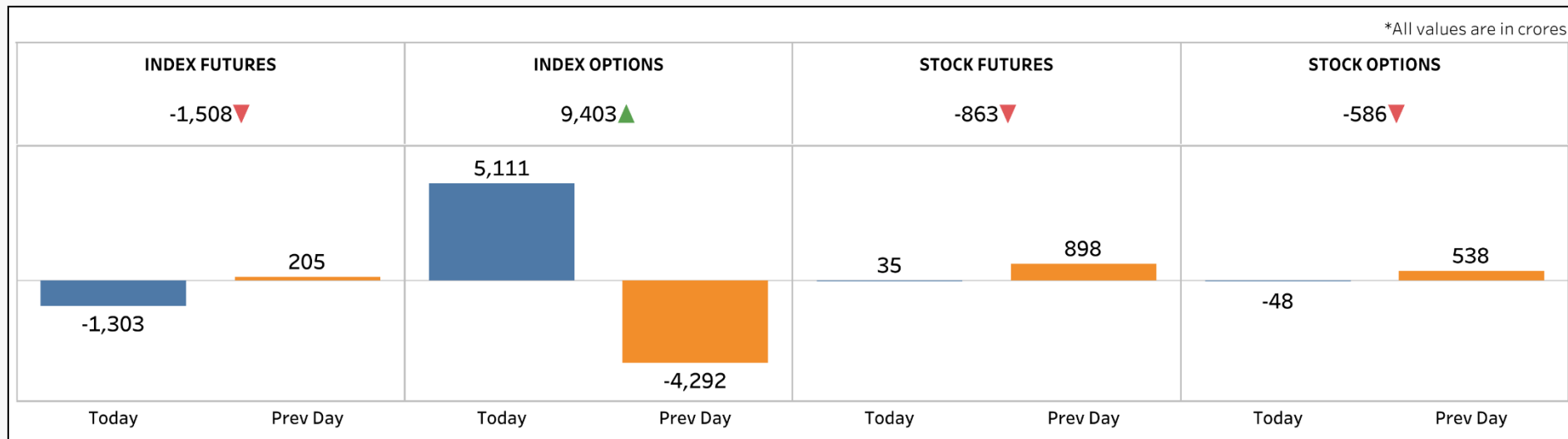
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

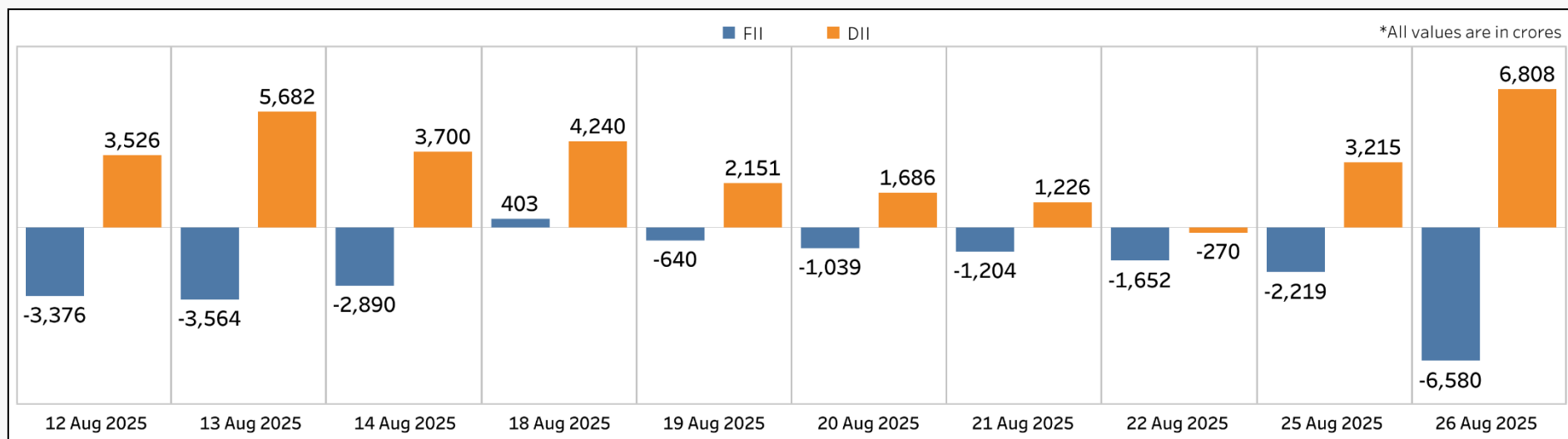
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-17,546 ▼	-7,962 ▼	62,699 ▲	-18,340 ▼	580 ▲	1,226 ▲	0	-36,251 ▼
12,013	1,271	29,832	15,436	0	-580	0	14,611
-5,533	-6,691	-32,867	-2,904	-230	-1,456	0	-21,640
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-52,912	-176,929	291,534	1,358,597	370	27,299	44,854	-3,974,216
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
284,303 ▲	9,147 ▲	-175,316 ▼	59,935 ▲	-267,336 ▼	-2,411 ▼	112,616 ▲	-5,344 ▼
186,436	7,720	113,909	32,039	86,434	1,612	31,575	-7,495
-97,867	-1,427	-61,407	-27,896	-180,902	-799	-81,041	-2,151
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
99,592	123,341	-527,578	2,244,780	-47,049	26,289	191,191	370,839
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

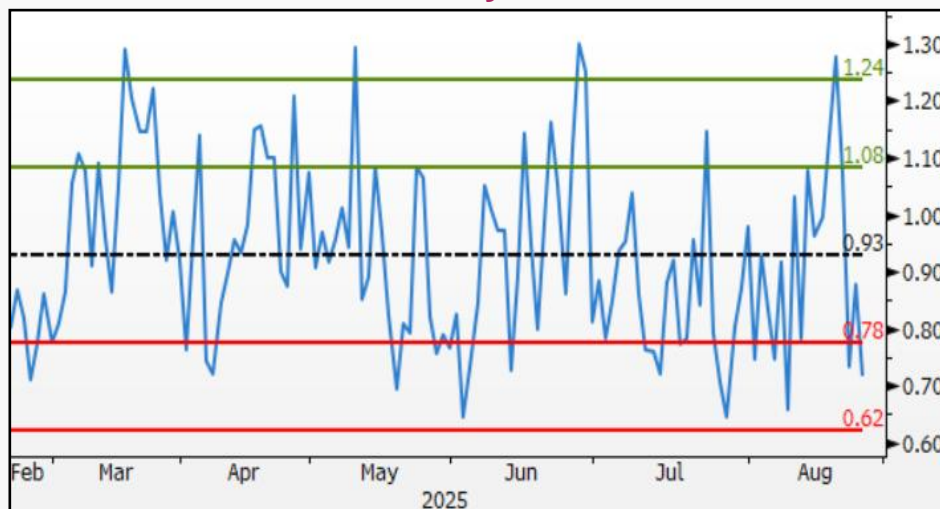
Daily Net Open Interest Change



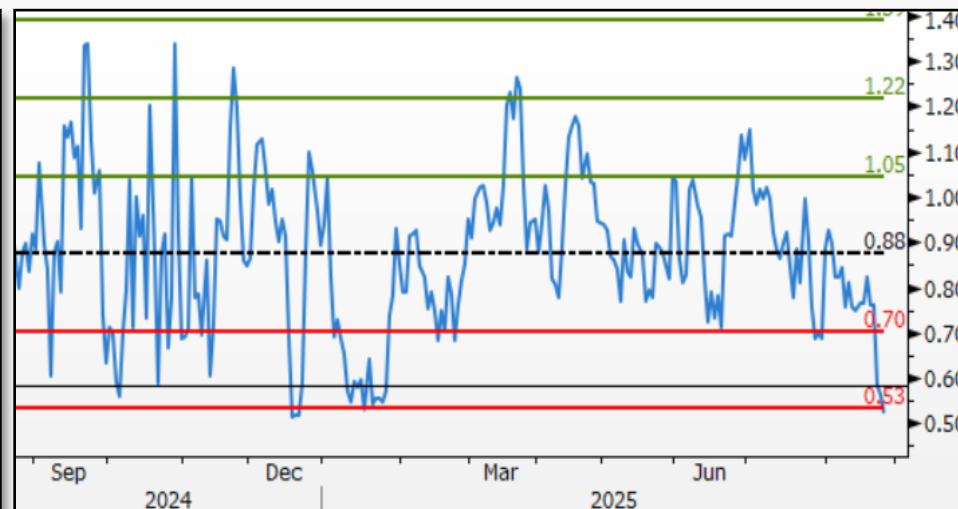
DII and FII Daily Cash Market Flows



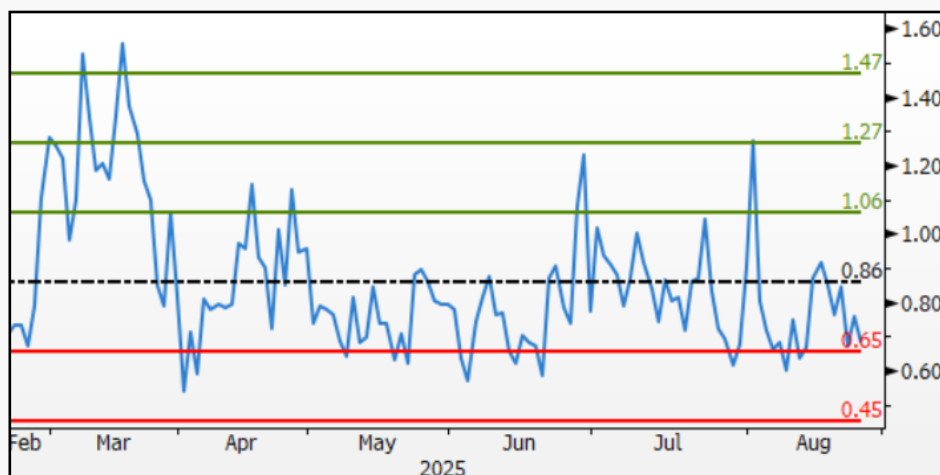
Nifty



Bank Nifty



Fin Nifty

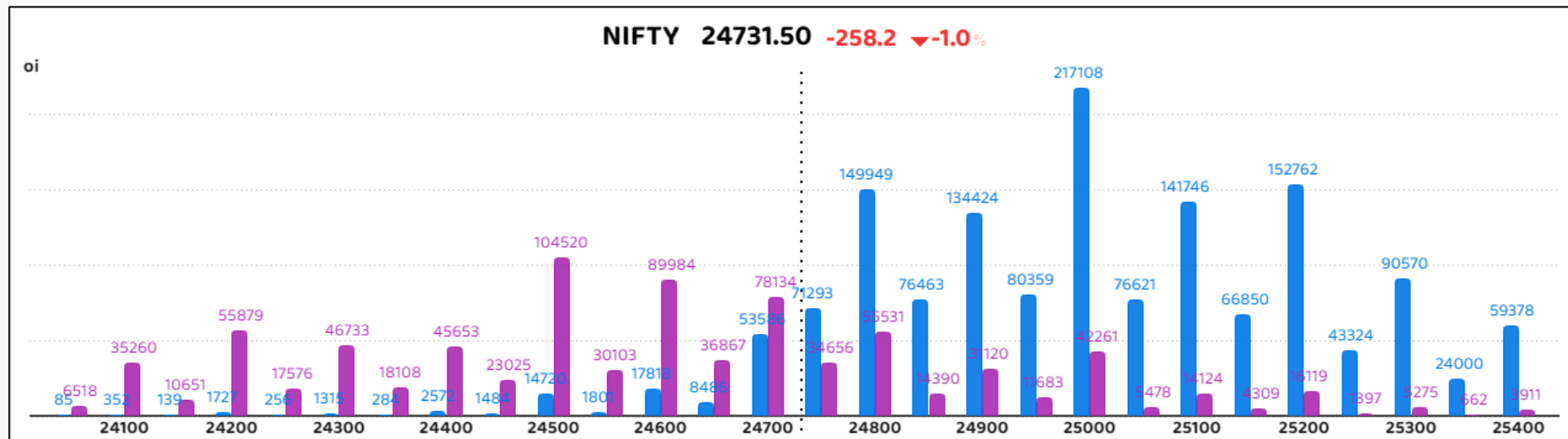


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,500 Call and the 54,000 Put saw the most amount of open interest.

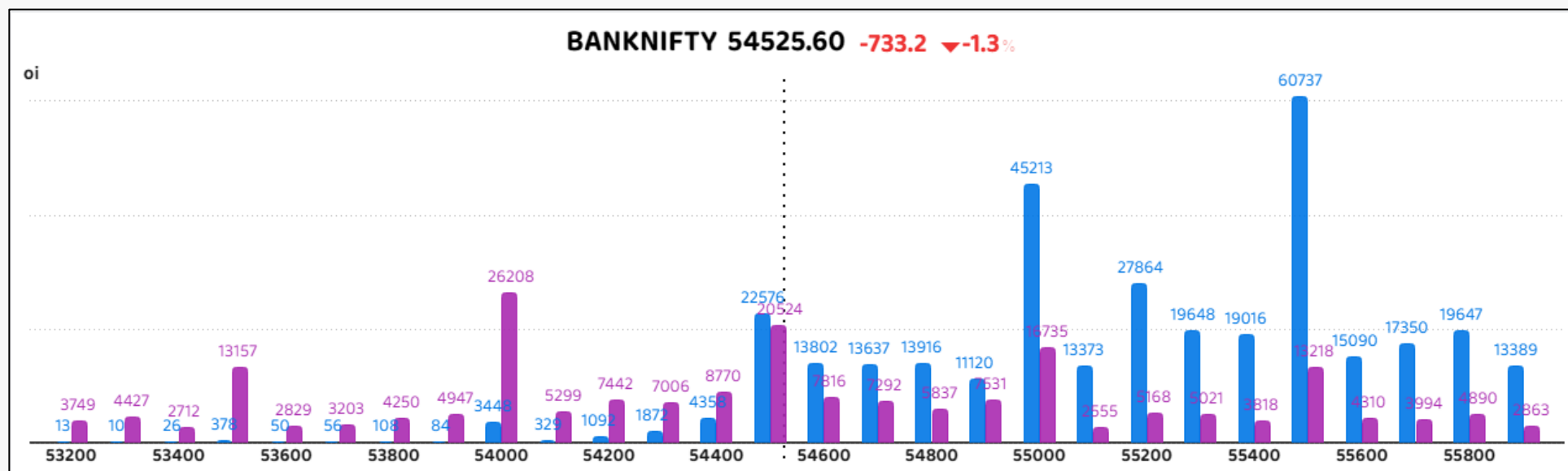
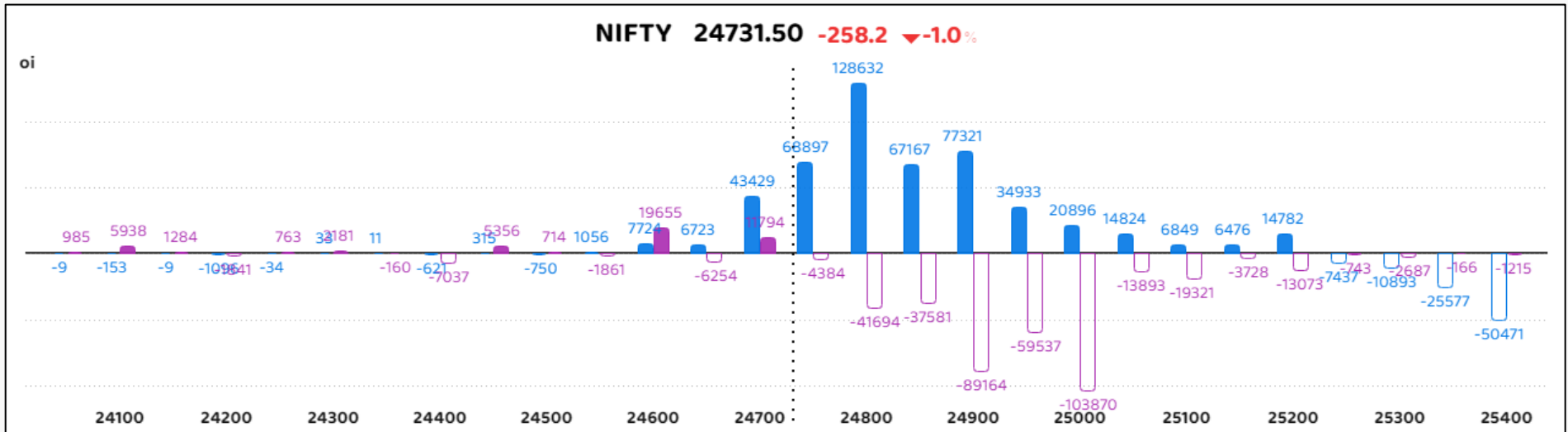


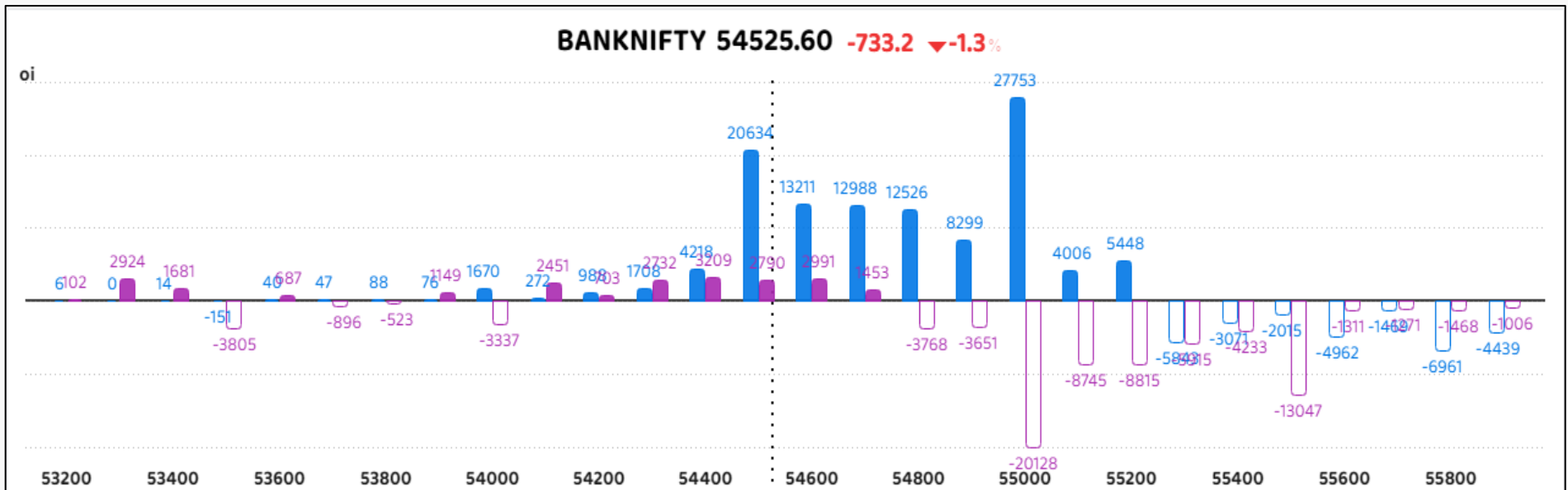
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,800 Call and the 25,000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,000 Call & the 55,000 Put

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	312.7	-2.8	42.3	50.3	25.1	81.7
ADITYA BIRLA FASHION	82.56	0.7	36.4	97.3	9.9	68.2
ADANI TOTAL GAS	635.7	0.7	44.4	78.9	24.1	67.0
NESTLE INDIA LTD	1162.2	0.8	20.5	28.8	14.2	66.4
PETRONET LNG LTD	268.8	-1.8	27.7	50.4	17.4	61.8

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LIC	888.35	-0.6	18.3	40.4	18.3	0.0
BHARAT ELECTRONICS	365.85	-1.7	22.8	60.0	22.8	0.0
INTERGLOBE AVIATION	6050	-1.1	21.6	43.2	21.6	0.0
INDIAN OIL CORP	138.96	-0.7	18.2	42.1	18.2	0.0
TRENT LTD	5295	-2.4	8.5	61.0	8.5	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BRITANNIA INDS	5765.5	3.9	153810	39238	3.9
PIDILITE INDS	3100.4	-0.2	10147	2646	3.8
SBI LIFE INSURANCE	1816.6	-1.6	13076	3485	3.8
EICHER MOTORS	6151	2.7	147626	41000	3.6
TORRENT PHARMA	3604.8	-1.9	4482	1314	3.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PHOENIX MILLS	1587.9	-1.8	2220	3327	1.5
KFIN TECHNOLOGIES	1109.6	-5.0	4411	6107	1.4
SIEMENS LTD	3164.6	-3.7	25709	33645	1.3
TORRENT POWER LTD	1282.5	-1.0	2248	2752	1.2
FED BANK LTD	195.01	-1.3	6197	6844	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
MAX HEALTHCARE	1221.4	-3.1	7309	8698	84.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
L&T FINANCE LTD	220	1.1	7596	7621	99.7
MARUTI SUZUKI IN	14714	1.8	91337	98277	92.9
RAIL VIKAS NIGAM	312.7	-2.8	4087	4526	90.3
UNO MINDA LTD	1276.8	-0.5	2913	3412	85.4
POWER FINANCE	388.55	-2.7	18132	21435	84.6

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
EICHER MOTORS	6151.0	2.7	147626	182872	80.7

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ANGEL ONE LTD	2339.1	-4.4	14611	7807	1.9
ZYDUS LIFESCIENCES	987.85	-3.5	5221	2948	1.8
SUZLON ENERGY	56.97	-0.8	19864	11240	1.8
MARUTI SUZUKI	14714	1.8	87926	54023	1.6
ICICI LOMBARD	1872.7	-2.4	4307	2680	1.6

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
MARUTI SUZUKI	14714	1.8	91337	45538	2.0
SUZLON ENERGY	56.97	-0.8	7032	4245	1.7
BRITANNIA INDS	5765.5	3.9	8742	5417	1.6
RAIL VIKAS NIGAM	312.7	-2.8	4087	2555	1.6
UNO MINDA LTD	1276.8	-0.5	2913	1845	1.6

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BRITANNIA INDS	5765.5	3.9	153810	26671	5.8
EICHER MOTORS	6151	2.7	147626	30005	4.9
MARUTI SUZUKI	14714	1.8	625149	168111	3.7
COLGATE PALMOLIVE	2284.1	0.1	43906	12988	3.4
CESC LTD	161.64	-1.6	12657	3796	3.3

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ZYDUS LIFESCIENC	987.85	-3.5	18945	3475	5.5
KFIN TECHNOLOGIE	1054.1	-5.0	6107	1538	4.0
BRITANNIA INDS	5765.5	3.9	39238	11554	3.4
EICHER MOTORS	6151	2.7	41000	12086	3.4
VODAFONE IDEA LT	6.71	-9.3	12253	3651	3.4

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MARUTI SUZUKI	14714	1.8	21.3	29.9	0.4	70.8
RAIL VIKAS NIGAM	312.7	-2.8	42.3	50.3	25.1	68.4
SHREE CEMENT	30110	0.3	23.5	31.9	7.9	65.0
UNO MINDA LTD	1276.8	-0.5	31.5	43.6	10.9	63.1
UPL LTD	723.1	0.0	27.6	42.7	2.9	62.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LIC	888.35	-0.6	18.3	40.4	18.3	0.0
BHARAT ELECTRONICS	365.85	-1.7	22.8	60.0	22.8	0.0
INTERGLOBE AVIATION	6050	-1.1	21.6	43.2	21.6	0.0
INDIAN OIL CORP	138.96	-0.7	18.2	42.1	18.2	0.0
TRENT LTD	5295	-2.4	8.5	61.0	8.5	0.0

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	2600	1023900	14.4%	2272	2200	533100	-3.2%	ITC	420	12457600	4.1%	403	415	1968000	2.9%
ADANIPTS	1400	1534725	6.4%	1315	1300	1024575	-1.2%	JIOFIN	330	7299100	4.5%	316	300	2629650	-5.0%
APOLLOHOSP	8400	128625	7.8%	7794	7300	122625	-6.3%	JSWSTEEL	1200	895050	14.6%	1047	920	521775	-12.1%
ASIANPAINT	2540	739000	2.4%	2481	2460	292500	-0.9%	KOTAKBANK	2000	1026800	1.7%	1966	1840	383200	-6.4%
AXISBANK	1100	2146250	4.8%	1050	1060	806875	0.9%	LT	3700	849100	4.5%	3541	3500	203000	-1.2%
BAJAJ-AUTO	9000	187425	3.5%	8692	8200	90150	-5.7%	M&M	3400	904200	2.1%	3331	3100	1238400	-6.9%
BAJAJFINSV	2000	841500	3.9%	1924	1720	543500	-10.6%	MARUTI	13000	302550	-11.6%	14714	14000	365200	-4.9%
BAJFINANCE	900	3129000	2.7%	876	900	1467000	2.7%	NESTLEIND	1150	617000	-1.0%	1162	1150	283000	-1.0%
BEL	390	7703550	6.6%	366	380	2126100	3.9%	NTPC	340	17190000	2.0%	333	340	2155500	2.0%
BHARTIARTL	2000	2526050	5.0%	1905	1860	528200	-2.3%	ONGC	235	16740000	0.3%	234	235	4848750	0.3%
CIPLA	1600	591750	1.3%	1580	1340	341250	-15.2%	POWERGRID	300	5219300	7.2%	280	300	847400	7.2%
COALINDIA	380	3152250	2.0%	372	370	1070550	-0.7%	RELIANCE	1420	3981500	2.5%	1385	1390	2173500	0.4%
DRREDDY	1300	1440625	2.9%	1263	1240	678750	-1.8%	SBILIFE	1900	702750	4.6%	1817	1800	179625	-0.9%
EICHERMOT	5750	179375	-6.5%	6151	6000	122500	-2.5%	SBIN	830	8013750	2.7%	808	800	3795750	-1.0%
ETERNAL	320	10136500	0.7%	318	300	3741775	-5.6%	SHRIRAMFIN	700	895125	17.7%	595	600	400950	0.9%
GRASIM	2900	205750	3.7%	2796	2740	154250	-2.0%	SUNPHARMA	1740	674100	8.7%	1600	1440	474600	-10.0%
HCLTECH	1540	883400	3.2%	1493	1500	520450	0.5%	TATACONSUM	1100	409200	1.9%	1080	1050	296450	-2.8%
HDFCBANK	1000	6087400	2.7%	973	1000	2425500	2.7%	TATAMOTORS	700	4874400	2.7%	682	600	1461600	-12.0%
HDFCLIFE	840	1269400	8.2%	777	770	983400	-0.8%	TATASTEEL	165	14014000	6.4%	155	140	4796000	-9.7%
HEROMOTOCO	4600	518400	-9.3%	5073	4500	319500	-11.3%	TCS	3300	1634500	4.5%	3157	3000	574700	-5.0%
HINDALCO	720	1682800	2.0%	706	700	1243200	-0.8%	TECHM	1650	564600	9.8%	1502	1500	432000	-0.1%
HINDUNILVR	2600	1407000	-3.4%	2693	2600	579600	-3.4%	TITAN	3700	208950	2.9%	3594	3500	336350	-2.6%
ICICIBANK	1500	3488100	5.9%	1417	1400	865200	-1.2%	TRENT	5500	377300	3.9%	5295	5000	246400	-5.6%
INDUSINDBK	800	1529500	5.8%	756	800	749000	5.8%	ULTRACEMCO	12900	92150	2.3%	12610	12800	40000	1.5%
INFY	1500	2436000	-1.9%	1530	1500	1655200	-1.9%	WIPRO	300	4551000	19.0%	252	240	3144000	-4.8%

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

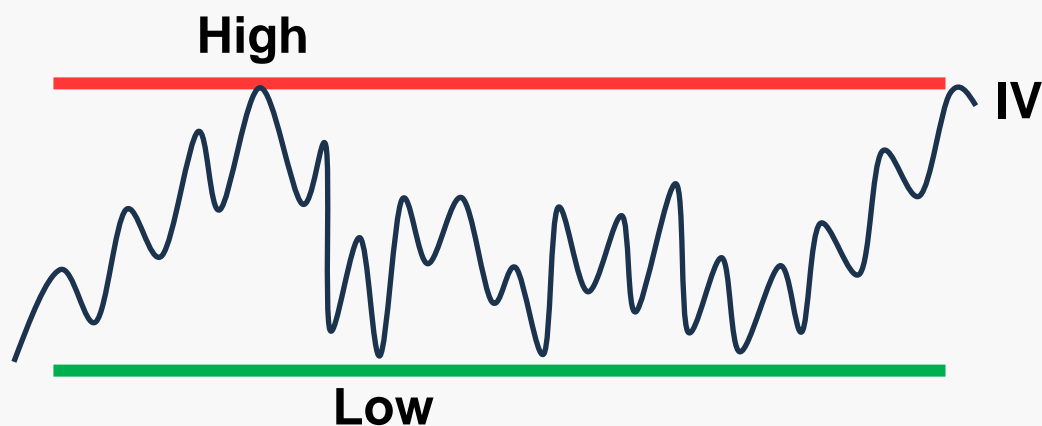
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

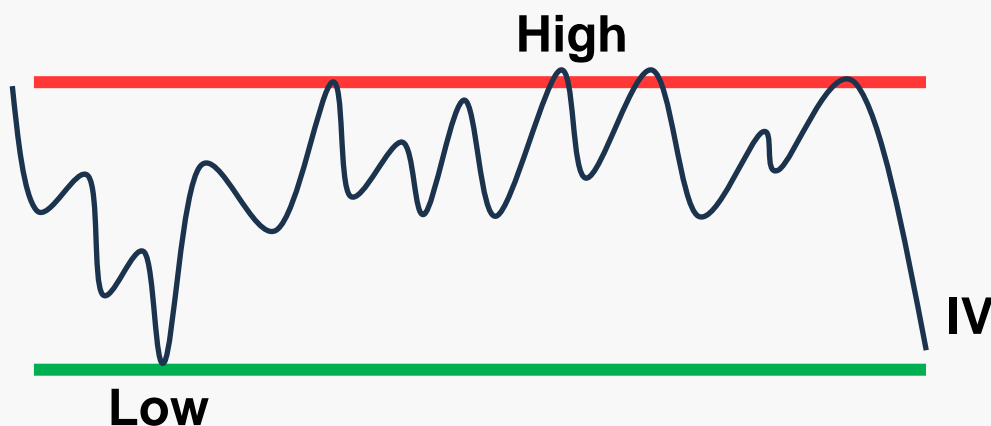
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (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

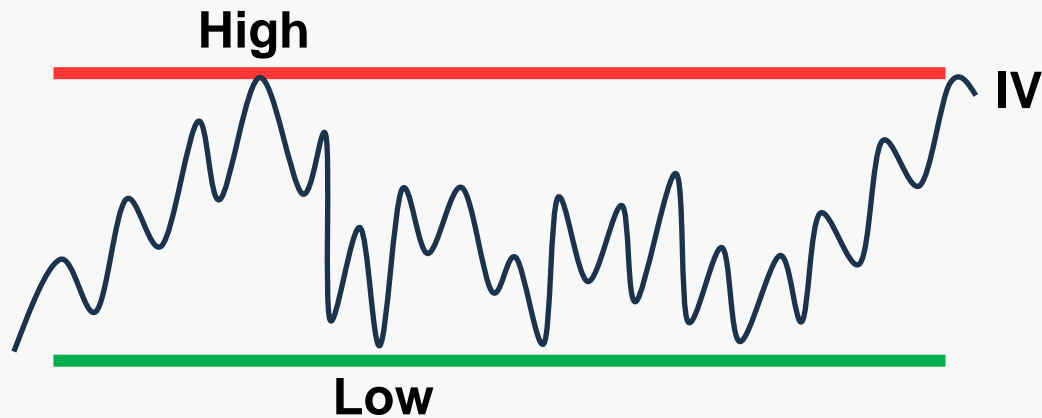


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

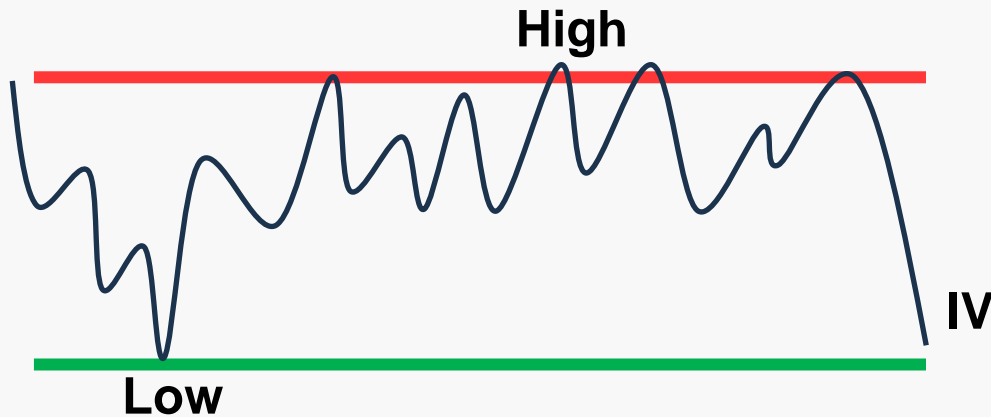


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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