



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,695	0.4%▲
Open Interest (OI)	2,01,49,875	0.0%▼
Change in OI (abs)	2,01,49,875	875▼
Premium / Discount (Abs)	120	23▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,252	0.1%▲
Open interest (OI)	21,50,555	7.4%▲
Change in OI (abs)	21,50,555	1,48,690▲
Premium / Discount (Abs)	315	10▲
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.3	0.26▼
Nifty ATM IV (%)	11.08	0.6▲
Bank Nifty ATM IV (%)	12.25	0.7▲
PCR (Nifty)	0.99	0.06▲
PCR (Bank Nifty)	0.96	0.00▲

The FII Long Ratio in Index Futures **Drop** to 13 %, **down** from 13.2 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	6,38,87,500	10.3%	259.31	5.7%
AMBER	15,93,400	9.4%	6939	0.2%
TECHM	2,08,90,800	7.3%	1404.6	0.9%
SAIL	20,39,04,800	5.3%	145.19	2.5%
BHEL	6,12,36,000	4.6%	274.4	3.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TRENT	98,49,700	17.2%	4304.9	-7.2%
FORTIS	1,16,34,300	12.0%	995.3	-2.7%
LICI	1,08,86,400	11.4%	902.25	-2.9%
NCC	2,27,98,800	6.4%	189.03	-3.6%
MANKIND	20,79,675	6.2%	2247.6	-1.0%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POWERINDIA	1,74,150	-4.9%	21305	1.8%
BDL	44,37,725	-4.7%	1521.2	4.7%
KPITTECH	41,25,675	-4.6%	1197.1	3.9%
HAL	98,16,750	-4.3%	4801.1	3.5%
BANKINDIA	5,60,61,200	-3.7%	146.17	0.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BSE	1,20,30,000	-6.2%	2634.5	-1.9%
PAYTM	2,10,64,150	-3.8%	1331.7	-1.2%
PFC	7,01,88,300	-2.3%	378.5	-0.9%
TATACONSUM	1,56,36,500	-2.3%	1145.6	-2.1%
BANKBARODA	10,21,20,525	-2.1%	288.5	-0.6%

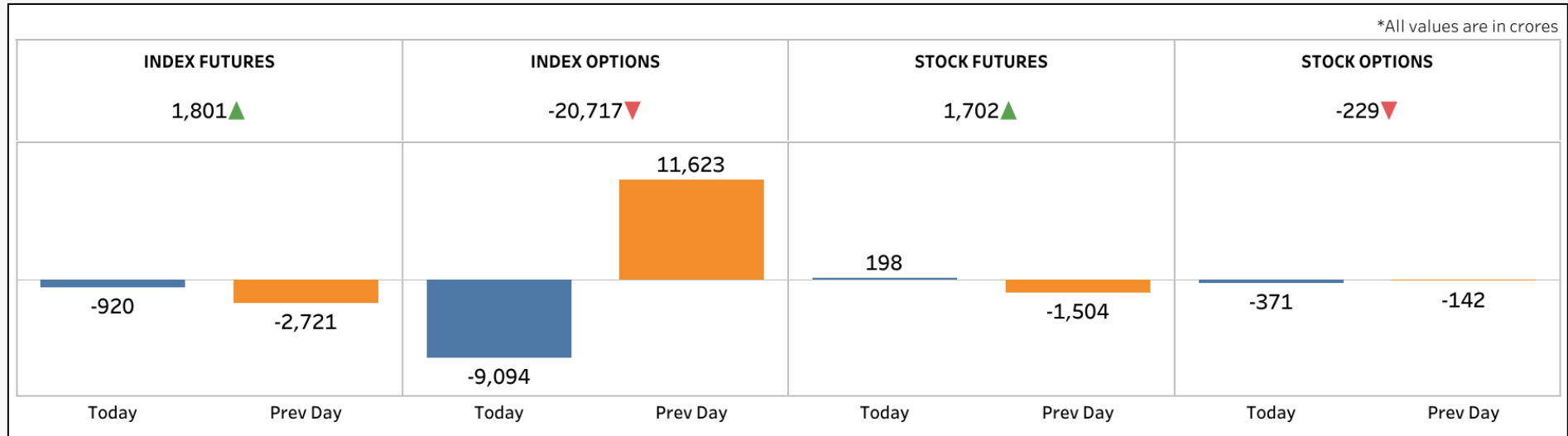
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

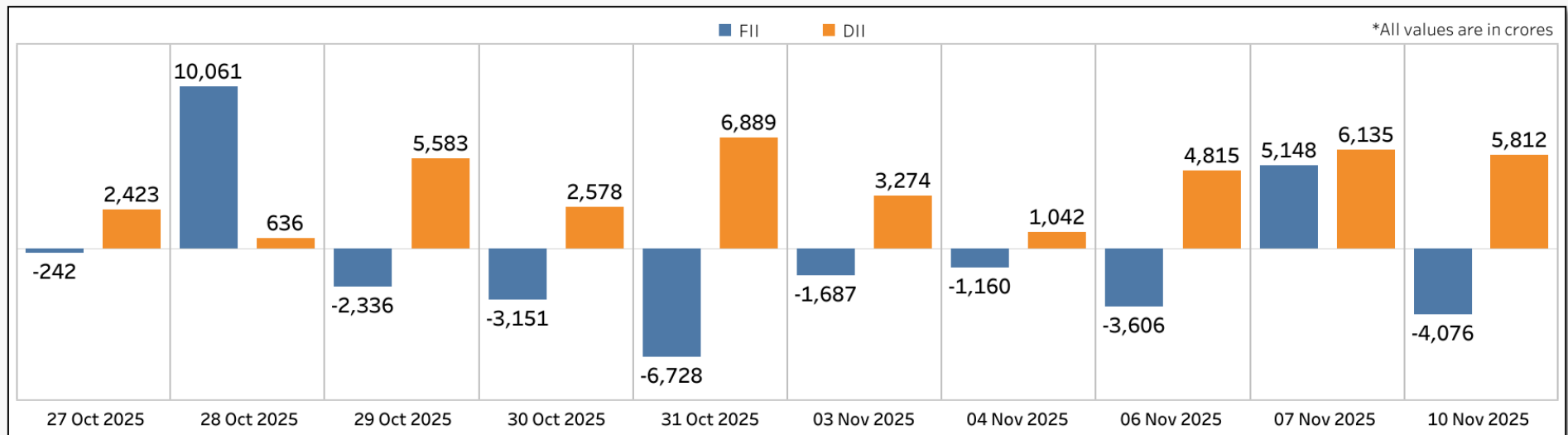
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-54,592 ▼	9,621 ▲	-55,704 ▼	22,603 ▲	-118 ▼	149 ▲	18,450 ▲	-18,585 ▼
31,940		31,615		0 118	-129 -278	1,050	
-22,652	-4,616 -14,237	-24,089	-1,085 -23,688			-17,400	-32,118 -13,533
Net O/S -11,044 Today Prev Day	Net O/S -156,707 Today Prev Day	Net O/S 251,578 Today Prev Day	Net O/S 1,262,010 Today Prev Day	Net O/S 1,381 Today Prev Day	Net O/S 38,812 Today Prev Day	Net O/S 21,977 Today Prev Day	Net O/S -4,459,551 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
128,311 ▲	-9,603 ▼	-16,550 ▼	-12,500 ▼	-73,600 ▼	-167 ▼	53,803 ▲	8,482 ▲
66,581		45,228 61,778	18,446 30,946	29,671	5,633 5,800		14,757 6,275
-61,730	-888			-43,929		-22,190	-75,993
Net O/S 51,283 Today Prev Day	Net O/S 108,207 Today Prev Day	Net O/S -357,077 Today Prev Day	Net O/S 2,629,135 Today Prev Day	Net O/S -41,620 Today Prev Day	Net O/S 9,688 Today Prev Day	Net O/S 83,521 Today Prev Day	Net O/S 568,406 Today Prev Day

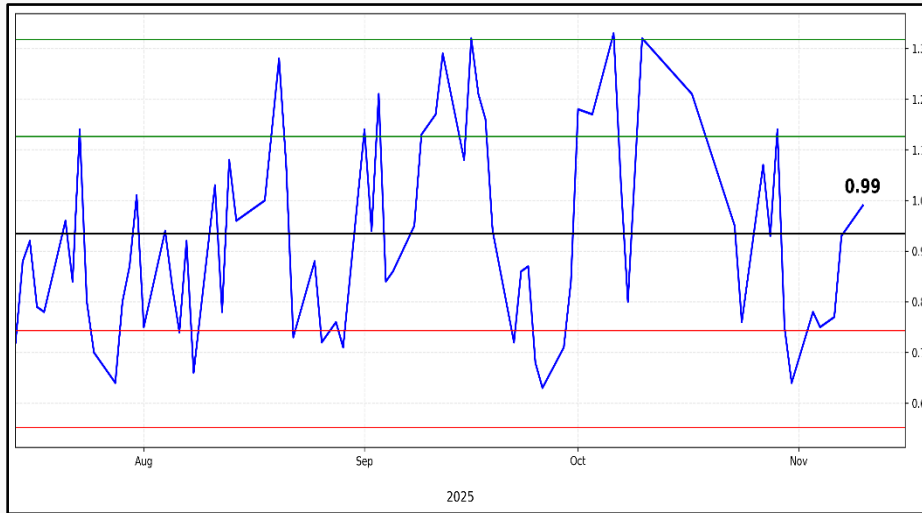
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



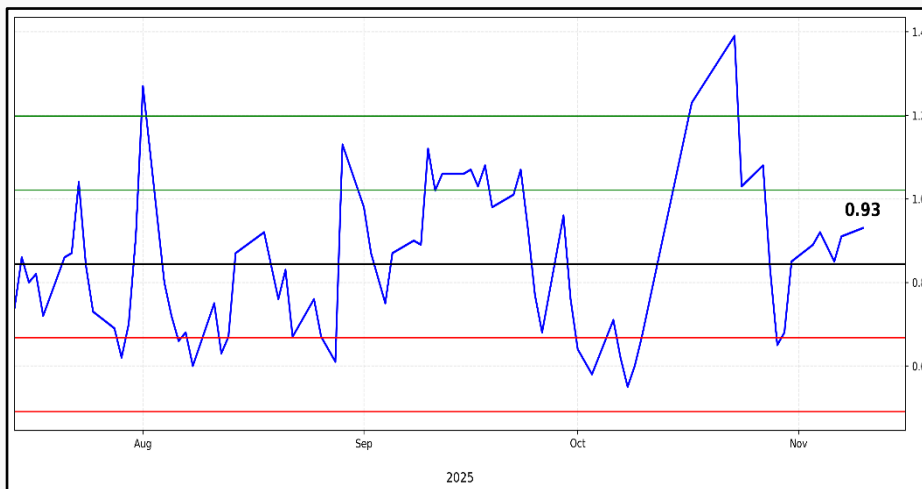
Nifty



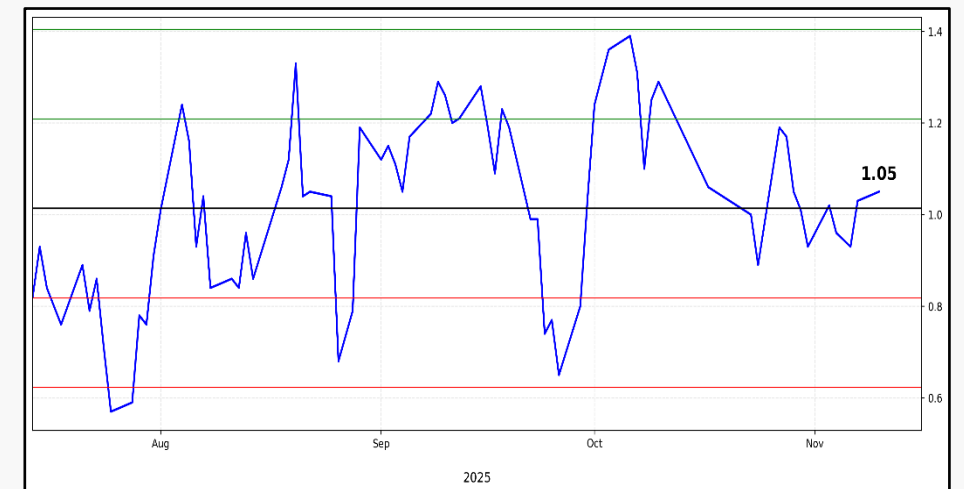
Bank Nifty



Fin Nifty

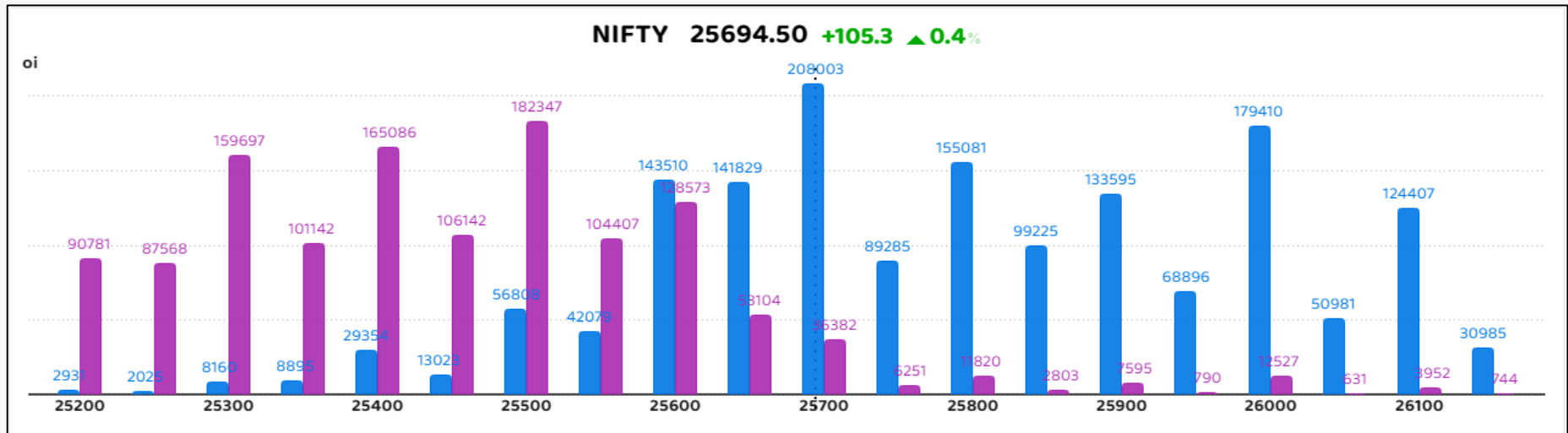


Midcap Select Nifty



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

Call  Put 



For Nifty, the 25,700 Call and 25,500 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.

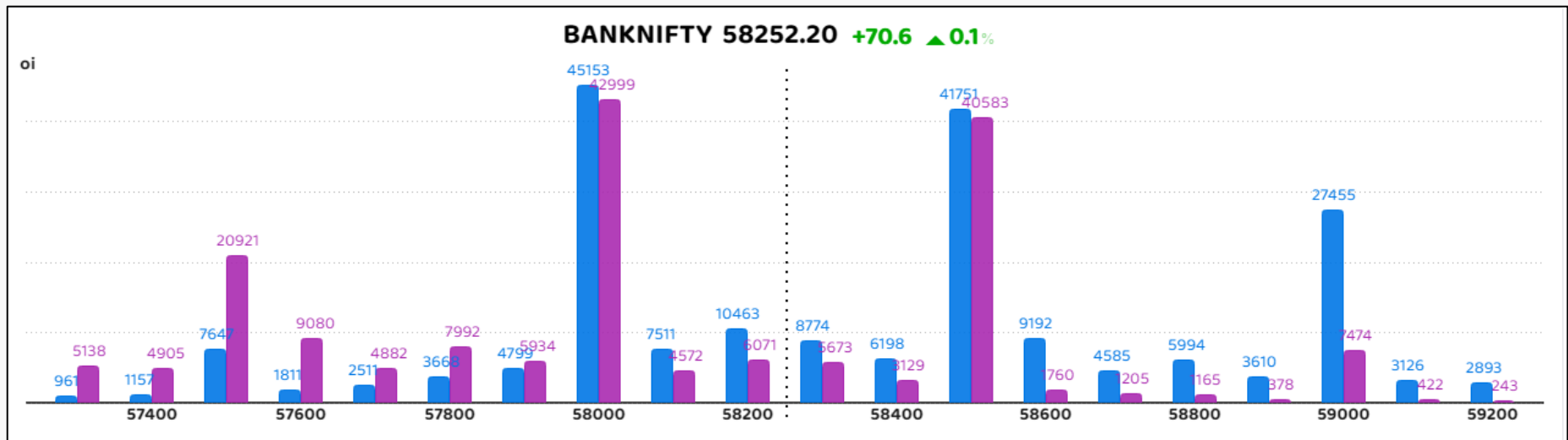
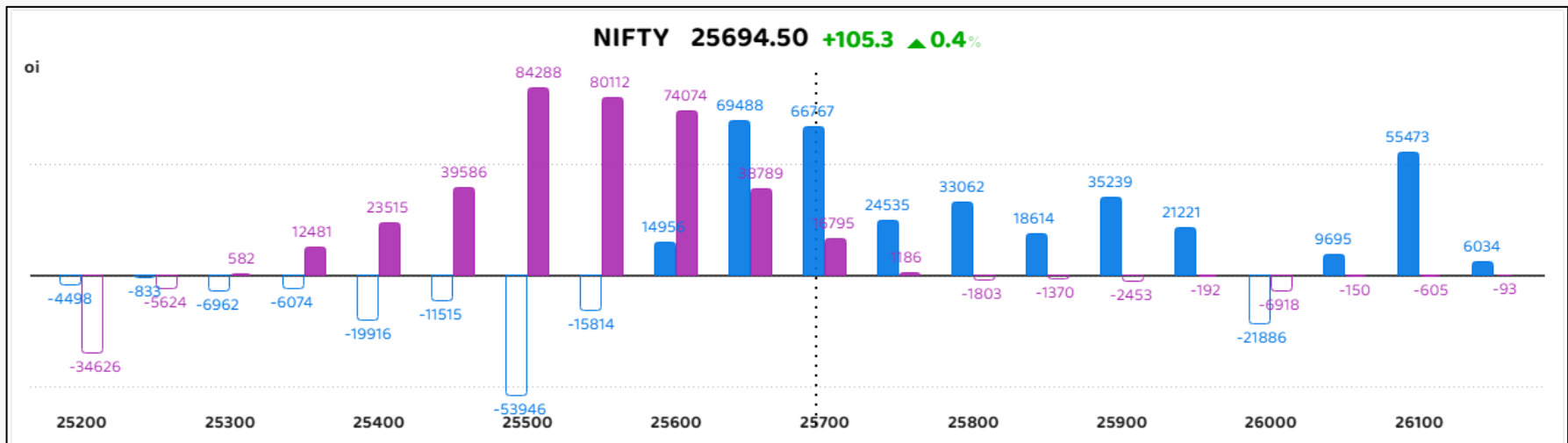


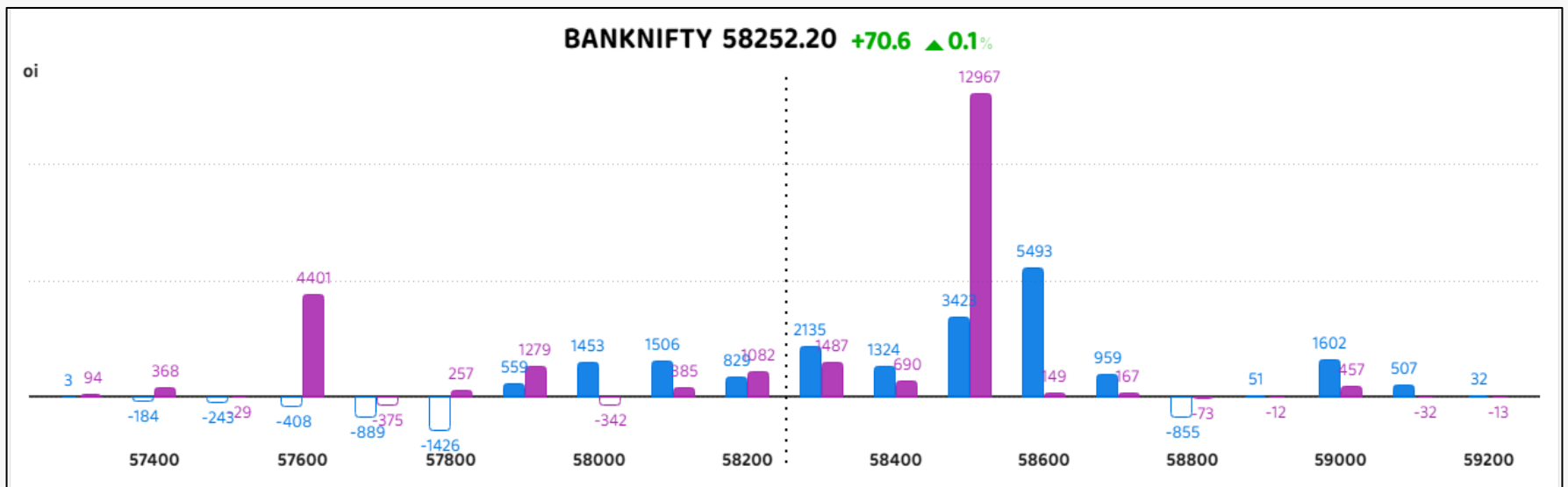
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,500 Call and the 25,500 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)
VOLTAS LTD	1340.7	1.5	37.6	46.9	16.9	68.9
BOSCH LTD	37280.0	1.3	25.2	36.2	2.1	67.8
ALKEM LABORATORI	5679.5	0.2	31.0	40.1	13.6	65.9
HDFC BANK LTD	984.5	0.2	17.2	28.0	1.5	59.3
SHREE CEMENT	27090.0	-1.0	21.0	31.9	7.9	54.7

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MAHINDRA & MAHIN	3663.9	-0.7	22.9	43.5	22.9	0.0
HDFC LIFE INSURA	750.7	0.2	17.6	80.6	17.6	0.0
CHOLAMANDALAM IN	1754.4	3.0	22.3	47.2	22.3	0.0
ULTRATECH CEMENT	11728.0	-1.0	16.6	31.0	16.6	0.2
LIC HOUSING FIN	571.7	0.1	19.2	41.9	19.1	0.4

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
FORTIS HEALTHCAR	992.7	-2.7	31.9	36.0	21.3	94.6
BLUE STAR LTD	1771.6	1.1	35.6	40.0	23.4	91.1
ALKEM LABORATORI	5679.5	0.2	31.0	40.1	13.6	89.1
VOLTAS LTD	1340.7	1.5	37.6	46.9	16.9	79.8
BAJAJ FINANCE LT	1085	1.7	26.6	34.0	21.0	79.5

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MAHINDRA & MAHIN	3663.9	-0.7	22.9	43.5	22.9	0.0
HDFC LIFE INSURA	750.7	0.2	17.6	80.6	17.6	0.0
CHOLAMANDALAM IN	1754.4	3.0	22.3	47.2	22.3	0.0
ONE 97 COMMUNICA	1330.7	-1.2	33.3	59.8	33.3	0.0
ULTRATECH CEMENT	11728.0	-1.0	16.6	31.0	16.6	0.4

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
YESBANK	22.7	-0.5	6,522	1,106	5.9
OFSS	8,176.5	1.2	16,173	3,307	4.9
MAZDOCK	2,705.6	1.3	39,102	9,040	4.3
GLENMARK	1,829.9	1.0	8,138	1,922	4.2
CGPOWER	738.2	0.7	5,077	1,224	4.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MARICO	719.2	1.1	1,204	1,247	1.0
SHRIRAMFIN	821.1	0.6	27,510	25,963	0.9
BPCL	365.2	-0.5	5,977	5,544	0.9
AUBANK	914.6	0.6	10,223	8,895	0.9
FEDERALBNK	238.5	0.5	4,664	3,986	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	7,016.5	-2.9	20,066	18,843	100.0
BANDHANBNK	152.5	-0.8	23,266	22,690	100.0
BLUESTARCO	1,771.6	1.1	8,767	8,160	100.0
DELHIVERY	427.6	-0.5	13,225	12,230	100.0
FORTIS	992.7	-2.7	6,157	5,701	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	7,016.5	-2.9	8,842	8,280	100.0
LTF	300.9	-0.9	10,754	9,933	100.0
SHRIRAMFIN	821.1	0.6	25,782	21,562	100.0
TRENT	4,283.7	-7.4	37,886	35,330	100.0
HINDALCO	785.2	-0.7	23,384	23,431	99.8

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NYKAA	260.8	6.1	62,527	44,680	100.0
TORNTPHARM	3,817.5	6.6	98,371	78,899	100.0
UNOMINDA	1,319.3	7.3	34,492	24,909	100.0
NATIONALUM	257.4	9.6	93,285	1,03,232	90.4
SAIL	144.3	2.4	46,541	66,846	69.6

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NYKAA	260.8	6.1	23,827	18,043	100.0
TORNTPHARM	3,817.5	6.6	25,724	20,210	100.0
UNOMINDA	1,319.3	7.3	10,424	9,227	100.0
TMPV	410.4	1.2	19,235	28,857	66.7
TRENT	4,283.7	-7.4	1,85,222	2,83,186	65.4

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BLUESTARCO	1,771.6	1.1	8,767	2,202	4.0
AMBER	7,016.5	-2.9	20,066	5,904	3.4
POWERINDIA	21,297.0	2.1	5,345	1,693	3.2
DELHIVERY	427.6	-0.5	13,225	4,718	2.8
HINDALCO	785.2	-0.7	38,847	15,784	2.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POWERINDIA	21,297.0	2.1	5,756	1,093	5.3
TORNTPHARM	3,817.5	6.6	4,520	1,335	3.4
AMBER	7,016.5	-2.9	8,842	3,265	2.7
SHRIRAMFIN	821.1	0.6	25,782	10,706	2.4
BLUESTARCO	1,771.6	1.1	2,520	1,151	2.2

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
TORNTPHARM	3,817.5	6.6	98,371	3,141	31.3
NYKAA	260.8	6.1	62,527	8,458	7.4
KPITTECH	1,192.9	3.5	58,712	8,830	6.6
NATIONALUM	257.4	9.6	93,285	16,435	5.7
TRENT	4,283.7	-7.4	2,91,005	55,188	5.3

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TORNTPHARM	3,817.5	6.6	25,724	1,335	19.3
TRENT	4,283.7	-7.4	1,85,222	24,686	7.5
KPITTECH	1,192.9	3.5	27,065	4,272	6.3
NATIONALUM	257.4	9.6	45,368	8,150	5.6
NYKAA	260.8	6.1	23,827	4,600	5.2

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	2294100	5.5%	2371	2500	2528700	5.5%	JIOFIN	310	10363500	2.7%	302	310	6067700	2.7%
ADANIPTS	1460	1852025	1.0%	1445	1400	1254475	-3.1%	JSWSTEEL	1340	1121850	13.6%	1179	1100	623700	-6.7%
APOLLOHOSP	8000	288625	6.2%	7530	7500	103500	-0.4%	KOTAKBANK	2200	2102000	5.1%	2093	2100	975600	0.3%
ASIANPAINT	2600	785000	-1.9%	2650	2600	583750	-1.9%	LT	4000	1059800	2.1%	3919	3900	421225	-0.5%
AXISBANK	1250	1745000	2.7%	1217	1140	1019375	-6.3%	M&M	3700	759200	1.0%	3664	3600	639600	-1.7%
BAJAJ-AUTO	9000	242625	2.6%	8772	8800	130425	0.3%	MARUTI	16500	500600	5.9%	15583	15500	158250	-0.5%
BAJAJFINSV	2100	566000	-0.9%	2118	1880	377250	-11.2%	MAXHEALTH	1200	654150	9.3%	1098	1120	300300	2.0%
BAJFINANCE	1100	3029250	1.4%	1085	1050	1626750	-3.2%	NESTLEIND	1300	2096500	2.9%	1263	1200	239500	-5.0%
BEL	420	10527900	0.8%	417	420	4715325	0.8%	NTPC	350	9076500	7.5%	325	300	2730000	-7.8%
BHARTIARTL	2100	4939525	4.0%	2020	2000	1760350	-1.0%	ONGC	260	16762500	3.4%	251	250	3069000	-0.6%
CIPLA	1600	1921875	5.9%	1512	1500	615375	-0.8%	POWERGRID	290	7577200	8.1%	268	270	2819600	0.7%
COALINDIA	389.75	5841450	2.2%	381	369.75	2243700	-3.0%	RELIANCE	1500	10736500	0.7%	1489	1500	4557500	0.7%
DRREDDY	1300	3277500	8.5%	1199	1200	730625	0.1%	SBILIFE	2020	2296875	1.5%	1989	1900	800250	-4.5%
EICHERMOT	7000	210175	1.9%	6867	6200	211750	-9.7%	SBIN	970	5130750	2.0%	951	900	4281750	-5.4%
ETERNAL	330	14845850	9.5%	301	300	4828175	-0.5%	SHRIRAMFIN	800	1867800	-2.6%	821	800	2806650	-2.6%
GRASIM	3000	970250	8.6%	2763	2800	239500	1.3%	SUNPHARMA	1700	824950	0.1%	1698	1660	458850	-2.2%
HCLTECH	1600	721700	3.9%	1541	1400	939400	-9.1%	TATACONSUM	1200	1115400	5.0%	1143	1100	300300	-3.7%
HDFCBANK	1000	8120750	1.6%	985	1000	2724700	1.6%	TMPV	450	5565600	9.6%	410	400	2780800	-2.5%
HDFCLIFE	800	1511400	6.6%	751	750	936100	-0.1%	TATASTEEL	185	26719000	1.9%	181	180	15724500	-0.8%
HINDALCO	800	4134200	1.9%	785	800	2559200	1.9%	TCS	3100	2212175	2.5%	3025	3000	1065750	-0.8%
HINDUNILVR	2600	2220300	7.9%	2409	2500	702000	3.8%	TECHM	1500	1092000	7.3%	1398	1300	479400	-7.0%
ICICIBANK	1400	8999900	3.9%	1348	1400	2974300	3.9%	TITAN	3800	632625	-0.1%	3803	3700	422100	-2.7%
INDIGO	6000	375300	7.4%	5589	5600	287100	0.2%	TRENT	4800	1105100	12.1%	4284	4300	524200	0.4%
INFY	1500	4100400	-0.9%	1514	1500	2375200	-0.9%	ULTRACEMCO	12000	131250	2.3%	11728	11000	60450	-6.2%
ITC	420	9548800	3.6%	406	410	3636800	1.1%	WIPRO	250	13827000	4.2%	240	240	6429000	0.1%

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

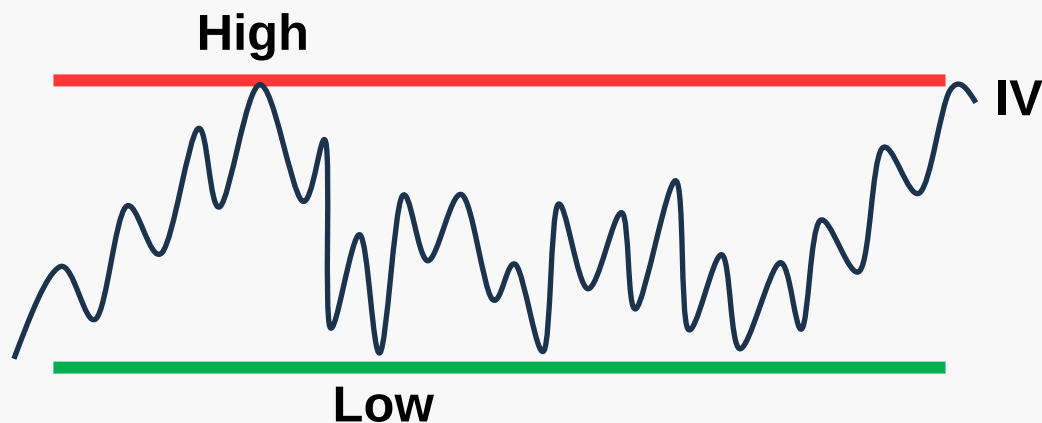
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

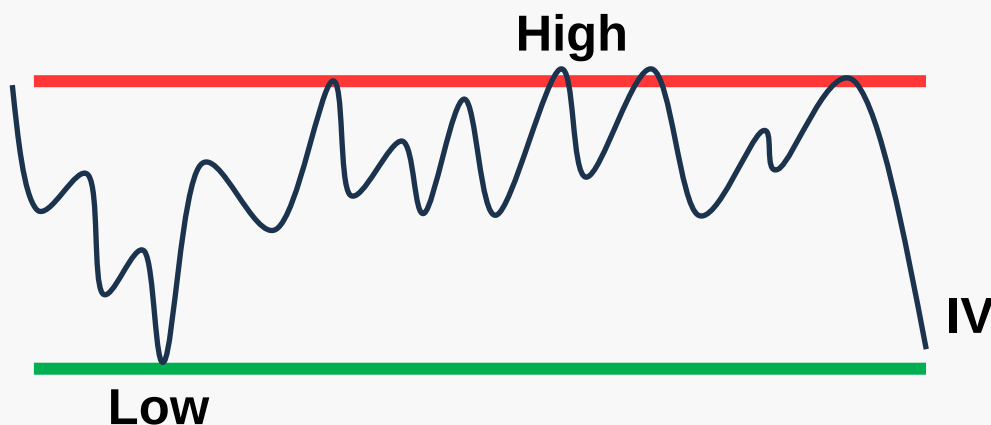
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

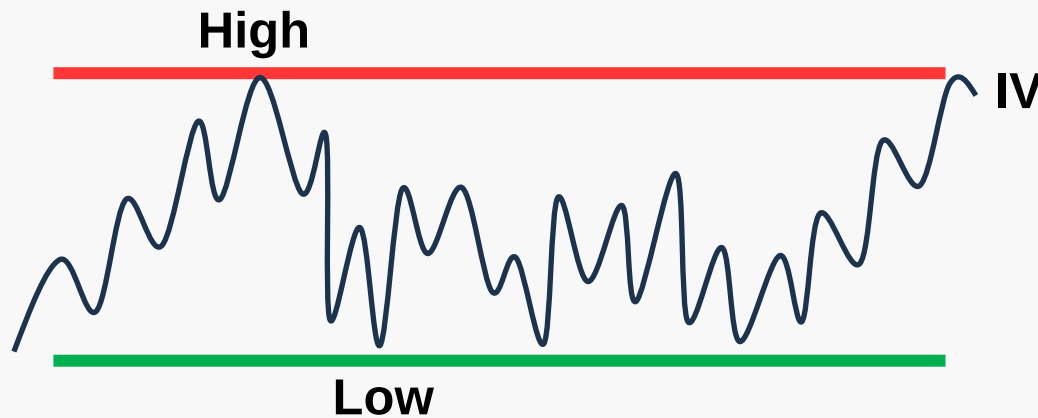


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

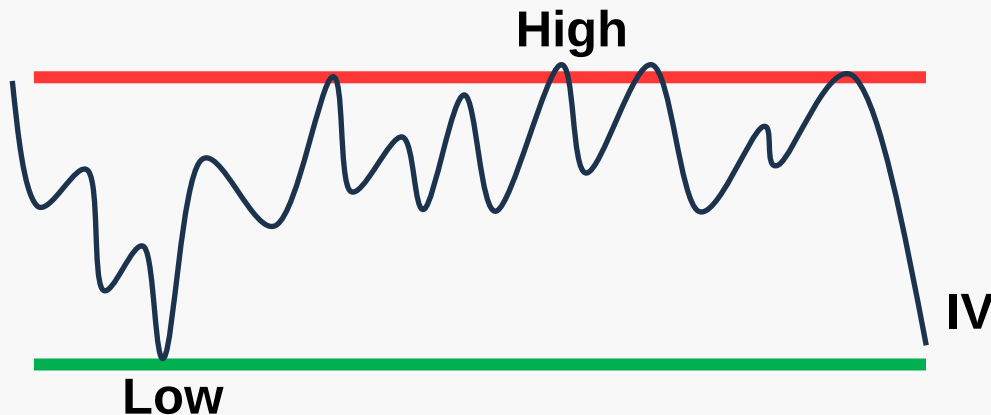


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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