



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,411	0.5%▲
Open Interest (OI)	1,88,20,050	0.5%▼
Change in OI (abs)	1,88,20,050	96,450▼
Premium / Discount (Abs)	126	34▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	56,862	0.8%▲
Open interest (OI)	19,70,150	3.9%▲
Change in OI (abs)	19,70,150	73,850▲
Premium / Discount (Abs)	252	31▲
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	10.1	0.02▼
Nifty ATM IV (%)	8.78	0.1▼
Bank Nifty ATM IV (%)	10.19	0.1▼
PCR (Nifty)	1.32	0.26▲
PCR (Bank Nifty)	1.14	0.06▲

The FII Long Ratio in Index Futures **jump** to 7.5 %, **up** from 7.5 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PGEL	1,11,69,200	18.3%	589.25	5.7%
PPLPHARMA	1,94,82,500	7.6%	202.83	2.1%
MARUTI	28,60,050	6.6%	16349	2.2%
DIVISLAB	27,50,900	5.4%	6498.5	5.4%
SBILIFE	68,08,875	4.6%	1820.4	0.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TATAELXSI	36,10,200	23.1%	5387.5	-3.4%
MANAPPURAM	2,91,96,000	7.7%	286.4	-3.0%
ZYDUSLIFE	88,43,400	5.5%	999.2	-0.1%
POWERINDIA	61,150	5.4%	17716	-0.7%
HINDZINC	3,44,84,975	5.0%	500.2	-2.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SONACOMS	2,18,19,000	-7.2%	434	0.8%
DIXON	15,09,950	-5.6%	17489	1.8%
INOXWIND	4,48,98,384	-4.2%	150.93	2.1%
HCLTECH	2,01,46,000	-4.2%	1487.8	0.6%
KFINTECH	25,47,450	-4.2%	1078.8	2.5%

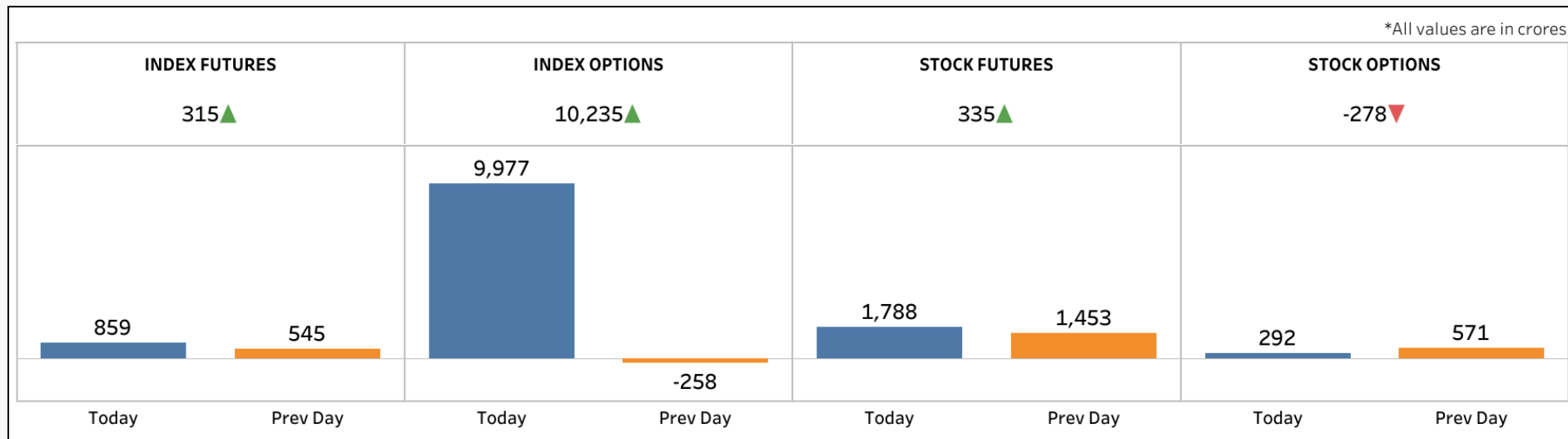
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TATAMOTORS	4,45,96,800	-11.8%	679.4	-0.6%
TORNTPHARM	22,98,500	-2.8%	3551.4	-0.5%
MCX	25,15,375	-2.6%	8719.5	-0.4%
TCS	3,17,41,325	-1.9%	3026.5	-1.0%
IIFL	1,59,88,500	-1.4%	492.55	-1.1%

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

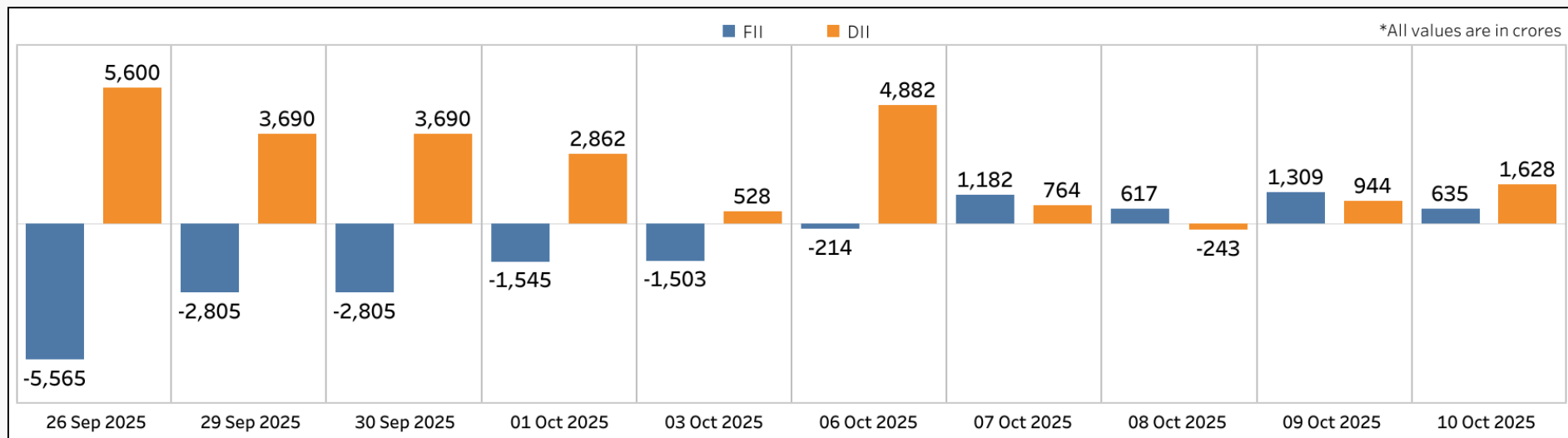
Open Interest Trends by Participant

FII							
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT				
9,769 ▲	1,605 ▲	43,482 ▲	3,164 ▲				
33,066 23,297	4,471 2,866	19,994 -23,488	24,738 21,574				
Net O/S 12,449 Today Prev Day	Net O/S -181,339 Today Prev Day	Net O/S 280,334 Today Prev Day	Net O/S 1,271,859 Today Prev Day				
DII							
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT				
-700 ▼	2,266 ▲	-2,100 ▼	19,340 ▲				
0 700	-240 -2,506	0 2,100	1,560 -17,780				
Net O/S 11,153 Today Prev Day	Net O/S 44,690 Today Prev Day	Net O/S 30,920 Today Prev Day	Net O/S -4,154,159 Today Prev Day				
Clients							
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT				
139,495 ▲	-3,271 ▼	-130,646 ▼	-10,836 ▼				
12,102 -127,393	942 -2,329	109,295 -21,351	-22,008 -11,172				
Net O/S -145,611 Today Prev Day	Net O/S 126,258 Today Prev Day	Net O/S -325,222 Today Prev Day	Net O/S 2,389,338 Today Prev Day				
Pro							
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT				
-148,565 ▼	-600 ▼	89,266 ▲	-11,668 ▼				
103,396 -45,169	-1,902 -1,302	1,358 -87,908	7,378 -4,290				
Net O/S 122,008 Today Prev Day	Net O/S 10,391 Today Prev Day	Net O/S 13,969 Today Prev Day	Net O/S 492,962 Today Prev Day				

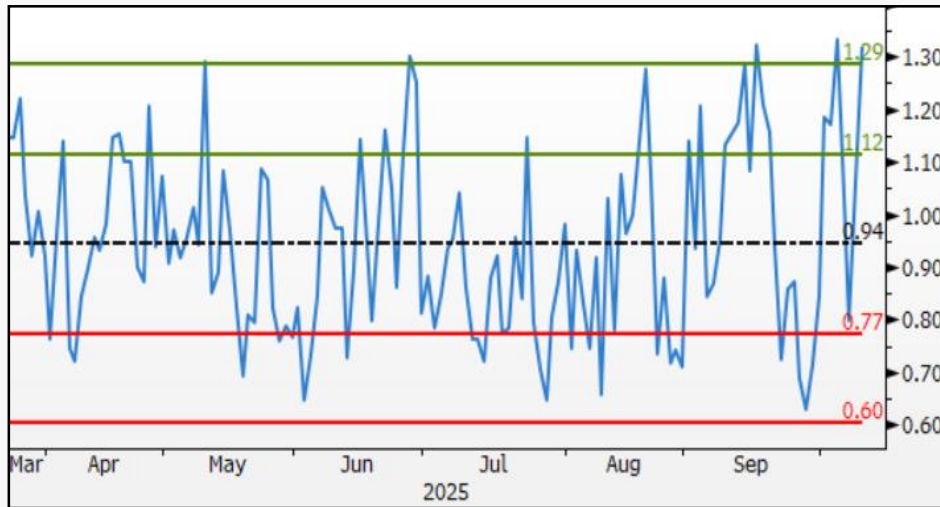
Daily Net Open Interest Change



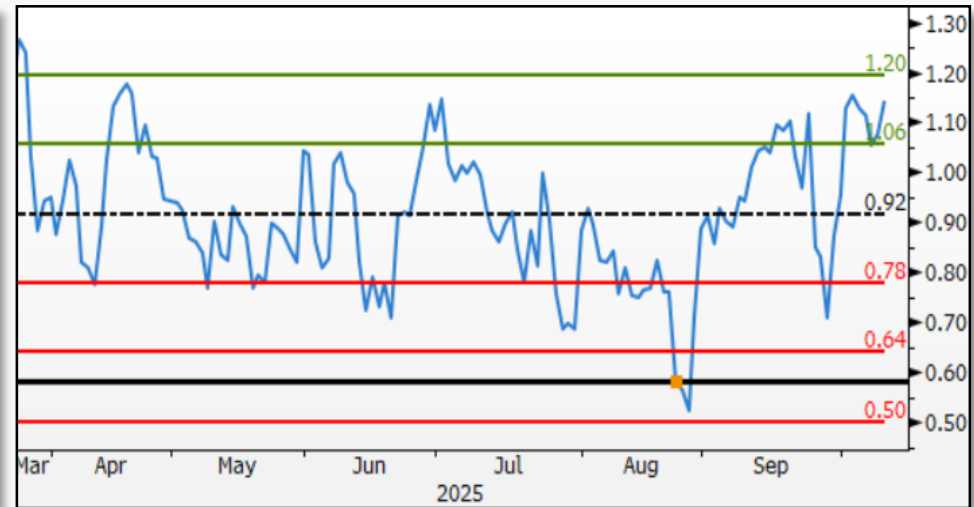
DII and FII Daily Cash Market Flows



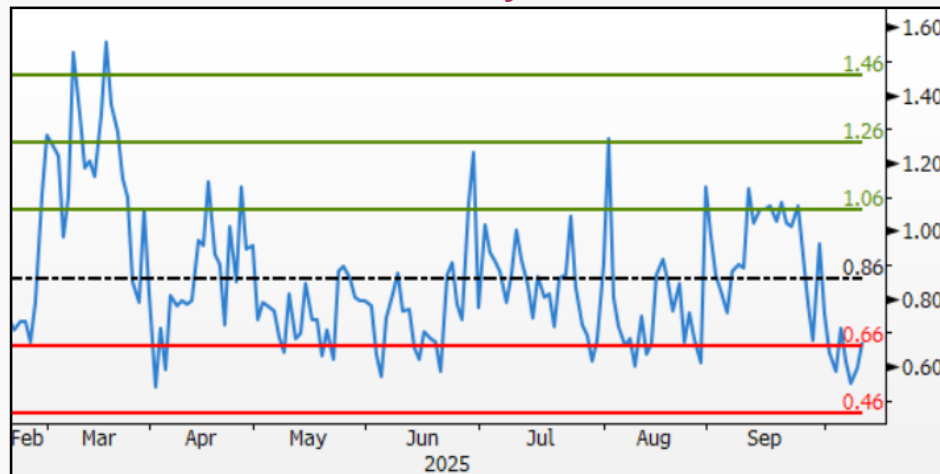
Nifty



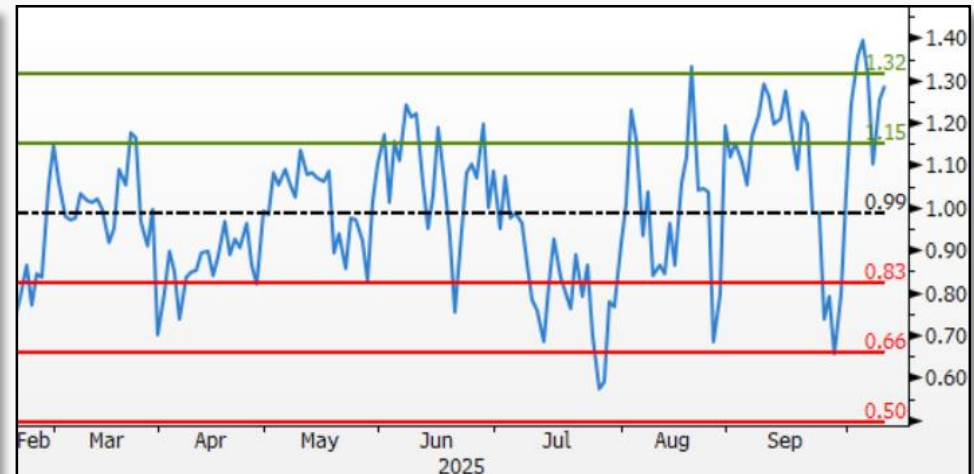
Bank Nifty



Fin Nifty

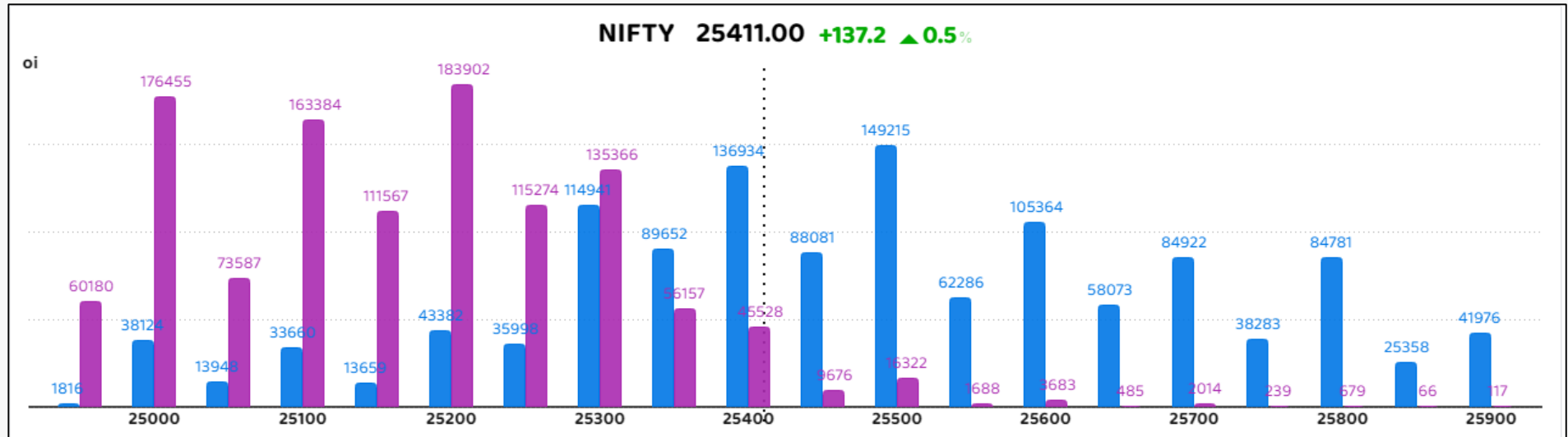


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,500 Call and the 25,200 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.

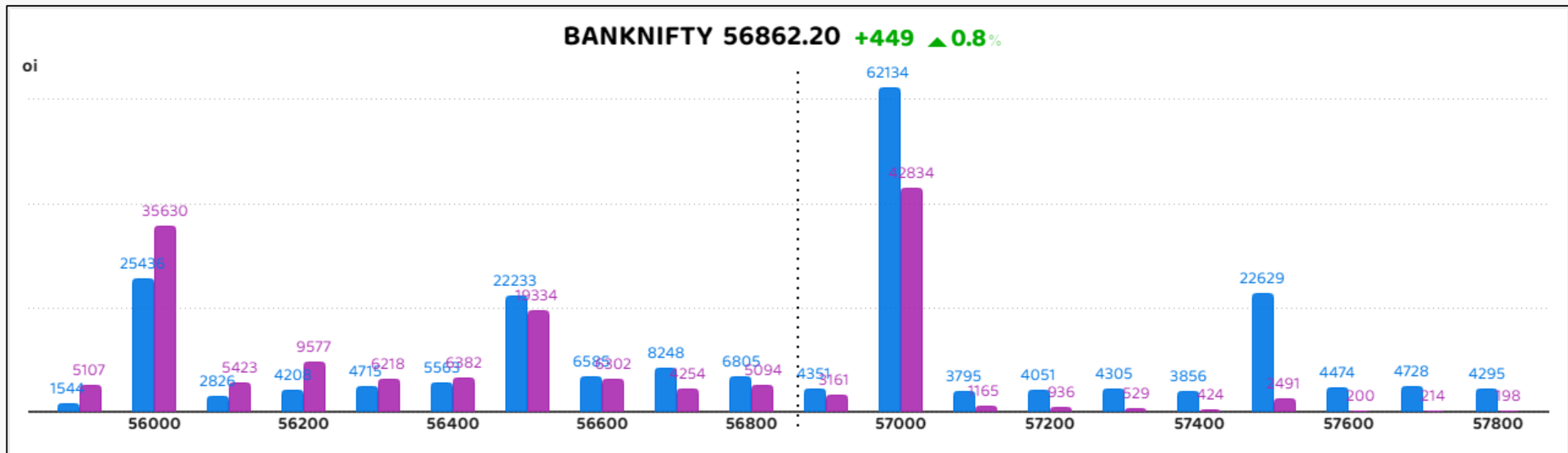
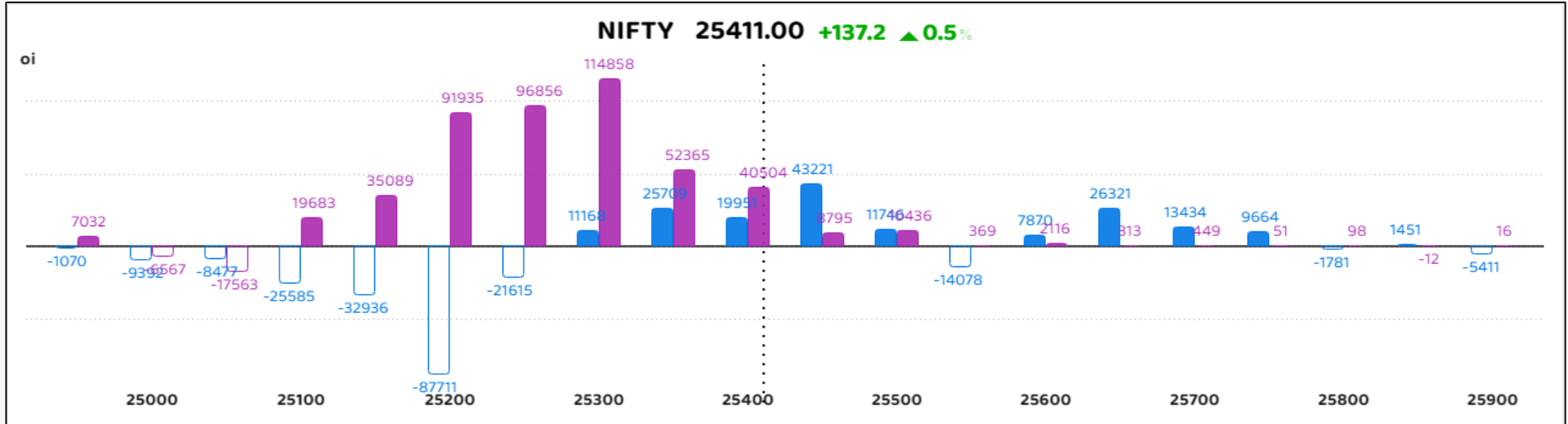


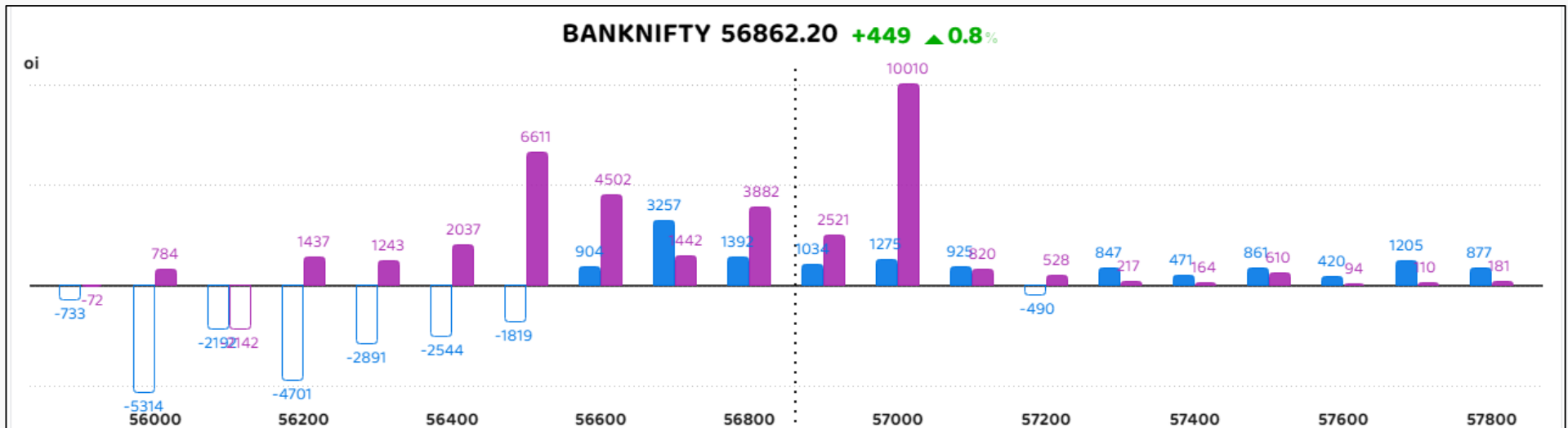
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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 25,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,000 Call & the 57,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SUZLON ENERGY	54.31	2.1	101.4	101.4	29.7	100.0
SBI CARDS & PAYMENTS	921.75	-0.1	28.7	36.9	4.6	74.5
PIRAMAL PHARMA	201.69	2.0	36.3	40.1	27.3	70.2
UNO MINDA LTD	1219.8	-3.2	33.3	43.6	10.9	68.4
BAJAJ AUTO LTD	8946.5	1.5	25.1	36.4	2.1	67.0

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
IDFC FIRST BANK	74.43	1.3	12.1	87.4	12.1	0.0
TCS	3028.3	-1.1	1.6	36.2	1.3	1.0
NTPC LTD	339.7	1.1	19.0	116.6	16.7	2.3
INTERGLOBE AVIATION	5735	0.2	21.9	43.2	21.0	4.1
GAIL INDIA LTD	179.21	0.4	25.3	91.4	22.4	4.2

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SUZLON ENERGY	54.31	2.1	101.4	101.4	29.7	100.0
VODAFONE IDEA LTD	9.04	0.1	77.2	212.9	29.5	92.2
SBI CARDS & PAYMENTS	921.75	-0.1	28.7	36.9	4.6	82.3
KAYNES TECHNOLOGY	7102	0.0	39.5	49.4	30.3	80.6
TATA ELXSI LTD	5407.5	-3.0	34.5	51.9	20.0	77.5

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
IDFC FIRST BANK	74.43	1.3	12.1	87.4	12.1	0.0
TCS	3028.3	-1.1	1.6	36.2	1.3	0.5
TATA MOTORS LTD	678.95	-0.3	9.1	72.6	3.9	1.2
CHOLAMANDALAM	1614.2	-0.4	24.7	47.2	23.4	3.1
BHARTI AIRTEL	1939.9	-0.1	15.8	28.2	15.0	3.1

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
LODHA DEVELOPERS	1155.9	2.4	13382	3000	4.5
COMPUTER AGE	3860.8	0.8	10442	2511	4.2
AMBER ENTERPRISES	8284.5	0.5	9045	2233	4.1
SUZLON ENERGY	54.31	2.1	11719	2933	4.0
JSW ENERGY LTD	546	0.6	6111	1536	4.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
EXIDE INDUS LTD	397.6	0.8	7297	6548	0.9
L&T FINANCE LTD	260.24	-1.6	6488	4837	0.7
MAX HEALTHCARE	1155.8	0.1	5273	3828	0.7
FORTIS HEALTHCARE	1068.85	-0.8	5790	3987	0.7
ETERNAL LTD	345.5	0.8	22194	15222	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
UNO MINDA LTD	1260	-3.2	6615	6615	100.0
KAYNES TECHNOLOGY	7102.5	0.0	15831	15831	100.0
CROM GREAVES	284.55	1.1	10167	10232	99.4
TATA ELXSI LTD	5573	-3.0	20212	21009	96.2
RAIL VIKAS NIGAM	344.4	-0.7	14814	15727	94.2

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAX HEALTHCARE	1156.4	0.1	5361	5571	96.2
PIRAMAL PHARMA	201.69	2.0	3042	3219	94.5
LODHA DEVELOPERS	1155.9	2.4	4875	5360	91.0
NUVAMA WEALTH	7235.5	1.5	3441	3785	90.9
UNO MINDA LTD	1219.8	-3.2	2996	3412	87.8

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NO STOCK OPTION MET THE CONDITION MET IN THE FOOTNOTE					

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NO STOCK OPTION MET THE CONDITION MET 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
UNO MINDA LTD	1219.8	-3.2	6615	2867	2.3
TATA ELXSI LTD	5407.5	-3.0	20212	10228	2.0
TCS	3028.3	-1.1	143144	84538	1.7
HPCL	452.5	-1.2	12251	7851	1.6
DIVI LABS LTD	6474.5	5.6	17182	11206	1.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PG ELECTROPLAST	585.95	5.9	8923	4252	2.1
DIVI LABS LTD	6474.5	5.6	15715	7543	2.1
TATA ELXSI LTD	5407.5	-3.0	8841	4564	1.9
UNO MINDA LTD	1219.8	-3.2	2996	1758	1.7
AVENUE SUPERMART	4320.4	0.4	10724	6356	1.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
YES BANK LTD	24.00	7.0	59445	9831	6.0
PG ELECTROPLAST	585.95	5.9	70354	13076	5.4
TATA ELXSI LTD	5407.5	-3.0	93218	19740	4.7
DIVI LABS LTD	6474.5	5.6	146225	33189	4.4
CIPLA LTD	1561.8	3.2	55389	14748	3.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TATA ELXSI LTD	5407.5	-3.0	50266	7193	7.0
YES BANK LTD	24	7.0	15996	2668	6.0
PG ELECTROPLAST	585.95	5.9	26052	4972	5.2
DIVI LABS LTD	6474.5	5.6	56302	16073	3.5
VOLTAS LTD	1417.3	2.6	21621	6372	3.4

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	2052300	1.9%	2551	2500	718500	-2.0%	JIOFIN	320	9343600	3.8%	308	300	6998300	-2.6%
ADANIPTS	1500	1444475	6.4%	1409	1400	1261600	-0.7%	JSWSTEEL	1300	1020600	11.3%	1168	1100	527175	-5.8%
APOLLOHOSP	7800	104000	1.5%	7681	7700	62250	0.2%	KOTAKBANK	2100	1090800	-2.3%	2150	2100	1523200	-2.3%
ASIANPAINT	2500	1193500	6.8%	2340	2300	492500	-1.7%	LT	3800	1271375	0.4%	3784	3700	408975	-2.2%
AXISBANK	1250	4396250	5.9%	1180	1180	1336875	0.0%	M&M	3600	1170400	4.2%	3455	3400	529000	-1.6%
BAJAJ-AUTO	9000	216750	0.6%	8947	8500	116325	-5.0%	MARUTI	17000	329800	4.5%	16265	16000	261900	-1.6%
BAJAJFINSV	2080	682500	3.8%	2004	1800	822500	-10.2%	MAXHEALTH	1200	449925	3.8%	1156	1060	499275	-8.3%
BAJFINANCE	1020	2705250	-0.4%	1024	1020	1506750	-0.4%	NESTLEIND	1200	815500	0.0%	1200	1180	461000	-1.6%
BEL	420	8849250	1.6%	414	410	5620200	-0.8%	NTPC	345	9405000	1.6%	340	380	1824000	11.9%
BHARTIARTL	1960	3480800	1.0%	1940	1900	865925	-2.1%	ONGC	250	18859500	1.5%	246	240	3249000	-2.6%
CIPLA	1600	703125	2.4%	1562	1500	328125	-4.0%	POWERGRID	300	7254200	3.8%	289	290	2103300	0.3%
COALINDIA	395	4742550	2.7%	385	380	2371950	-1.2%	RELIANCE	1400	10183000	1.3%	1382	1400	3931000	1.3%
DRREDDY	1320	1027500	4.4%	1264	1250	331250	-1.1%	SBILIFE	1800	580875	-0.6%	1810	1800	227625	-0.6%
EICHERMOT	7000	297850	0.5%	6965	6500	198975	-6.7%	SBIN	880	6622500	-0.1%	881	870	3477750	-1.2%
ETERNAL	335	10340200	-3.8%	348	330	5318025	-5.3%	SHRIRAMFIN	700	1014750	5.3%	665	660	924000	-0.8%
GRASIM	2900	341750	3.2%	2811	2700	144500	-3.9%	SUNPHARMA	1680	1237250	0.5%	1671	1500	687050	-10.2%
HCLTECH	1500	1099350	0.3%	1496	1400	509950	-6.4%	TATACONSUM	1240	427350	10.1%	1127	1100	200750	-2.4%
HDFCBANK	1000	5670500	1.9%	981	950	2116400	-3.2%	TATAMOTORS	700	13692800	3.1%	679	650	3511200	-4.3%
HDFCLIFE	800	1929400	7.1%	747	760	652300	1.7%	TATASTEEL	180	25773000	3.5%	174	165	9900000	-5.1%
HINDALCO	800	3452400	3.4%	774	750	1678600	-3.1%	TCS	3200	3899700	5.7%	3028	3000	1585675	-0.9%
HINDUNILVR	2600	930600	2.8%	2529	2500	392100	-1.1%	TECHM	1500	676200	2.9%	1457	1400	617400	-3.9%
ICICIBANK	1400	4535300	1.4%	1380	1400	2343600	1.4%	TITAN	3400	592550	-3.7%	3532	3500	441700	-0.9%
INDIGO	6000	399150	4.6%	5735	5500	190500	-4.1%	TRENT	5500	1045400	17.2%	4691	4700	452500	0.2%
INFY	1500	3779200	-1.0%	1515	1500	2224000	-1.0%	ULTRACEMCO	13000	132050	5.9%	12281	12000	53600	-2.3%
ITC	410	8662400	1.8%	403	400	4508800	-0.7%	WIPRO	250	5571000	0.5%	249	240	4671000	-3.5%

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

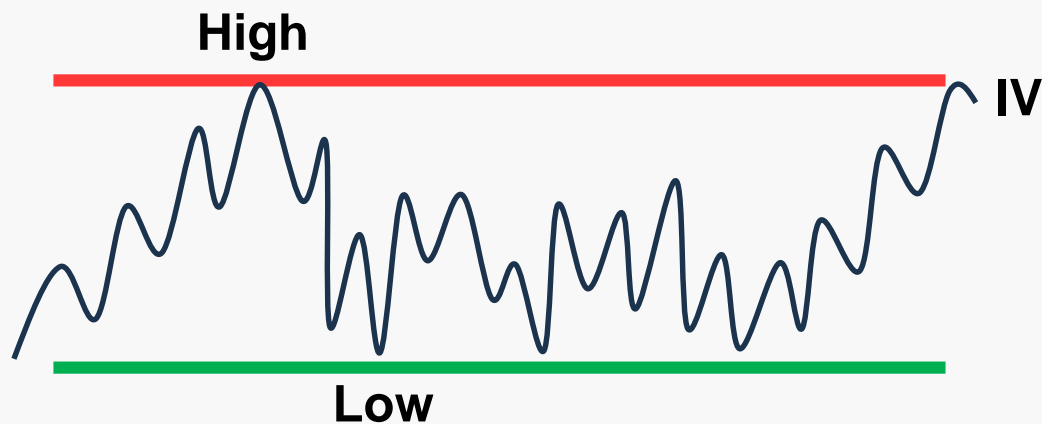
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

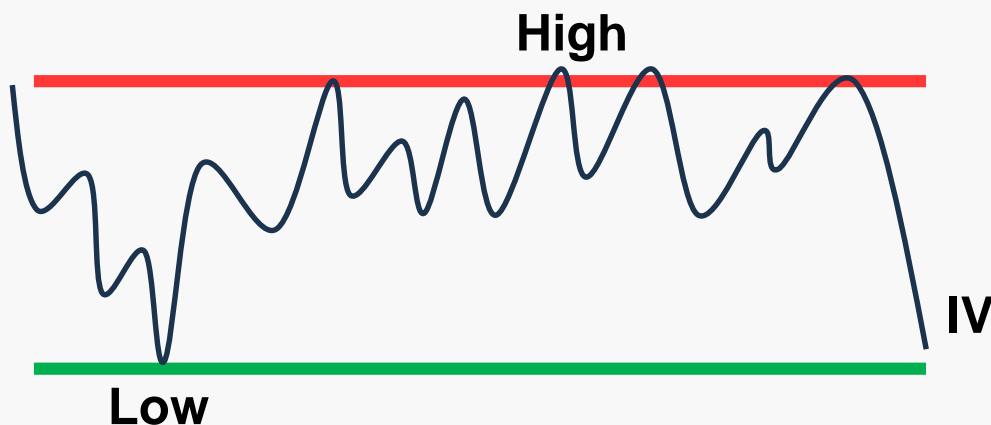
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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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