



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,811	0.5%▲
Open Interest (OI)	2,01,87,575	0.2%▲
Change in OI (abs)	2,01,87,575	37,700▲
Premium / Discount (Abs)	116	4▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,252	0.2%▲
Open interest (OI)	21,50,555	0.4%▼
Change in OI (abs)	21,50,555	8,055▼
Premium / Discount (Abs)	315	82▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	12.49	0.19▲
Nifty ATM IV (%)	11.35	0.3▲
Bank Nifty ATM IV (%)	12.23	0.0▼
PCR (Nifty)	1.08	0.09▲
PCR (Bank Nifty)	0.97	0.01▲

The FII Long Ratio in Index Futures **Drop** to 12.2 %, **down** from 13 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CONCOR	3,07,45,000	4.6%	523.6	0.5%
PERSISTENT	25,02,600	4.5%	6050.5	2.7%
TORNTPOWER	38,26,350	4.2%	1344.8	2.2%
SRF	36,17,800	4.1%	2945.4	1.0%
MFSL	64,90,800	4.1%	1644	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
VOLTAS	1,60,00,500	8.3%	1296.2	-2.4%
TMPV	5,34,07,200	7.8%	407.45	-1.1%
IGL	1,76,57,750	7.3%	208.1	-0.4%
BAJAJFINSV	2,00,43,500	6.2%	1993.8	-6.4%
SIEMENS	26,09,400	6.0%	3037.1	-1.0%

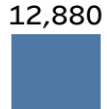
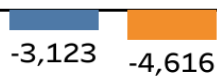
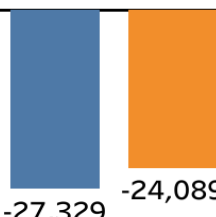
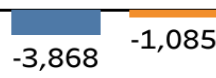
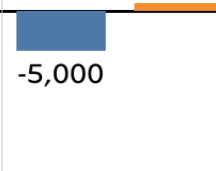
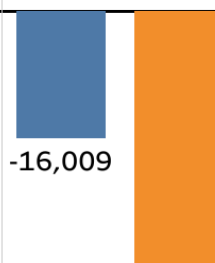
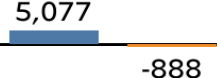
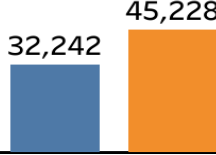
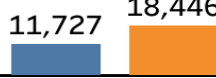
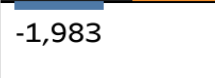
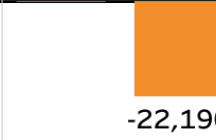
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KPITTECH	37,27,950	-9.6%	1216.1	1.6%
BAJAJ-AUTO	33,71,025	-4.1%	8923.5	1.3%
BEL	11,03,43,450	-4.1%	428.9	2.4%
TATACONSUM	1,50,72,200	-3.6%	1158.6	1.1%
BHARATFORG	99,02,000	-3.6%	1405.7	5.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TVSMOTOR	84,44,450	-4.6%	3481.4	-0.6%
LUPIN	1,16,14,400	-3.6%	1980.1	-0.8%
LAURUSLABS	1,73,41,700	-3.2%	989.35	-1.4%
FEDERALBNK	7,07,05,000	-2.9%	236.85	-1.0%
SAIL	19,84,24,600	-2.7%	144.8	-0.3%

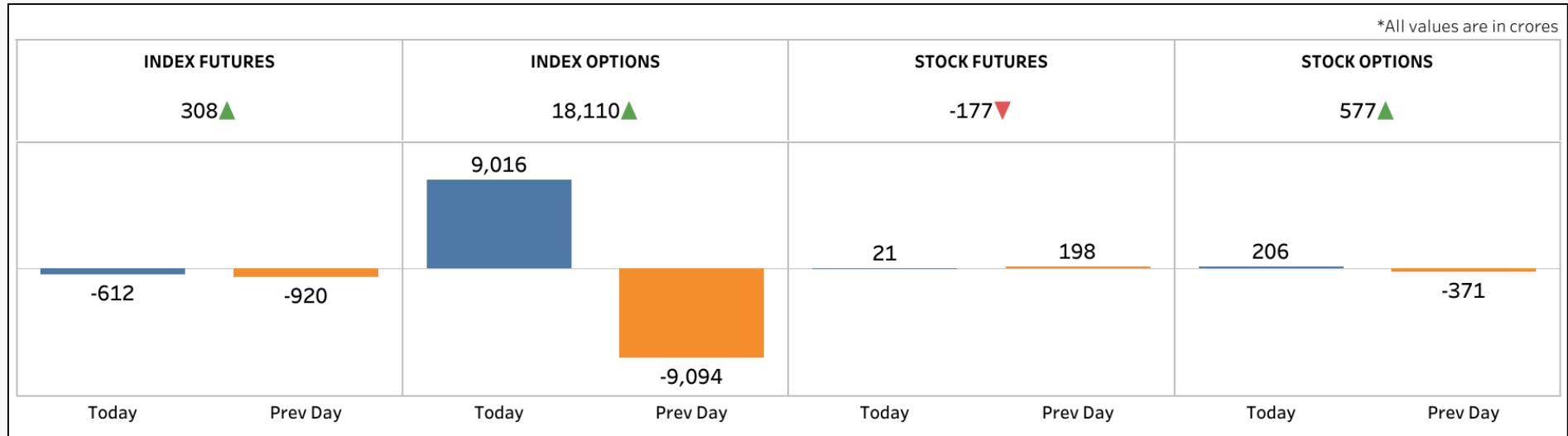
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

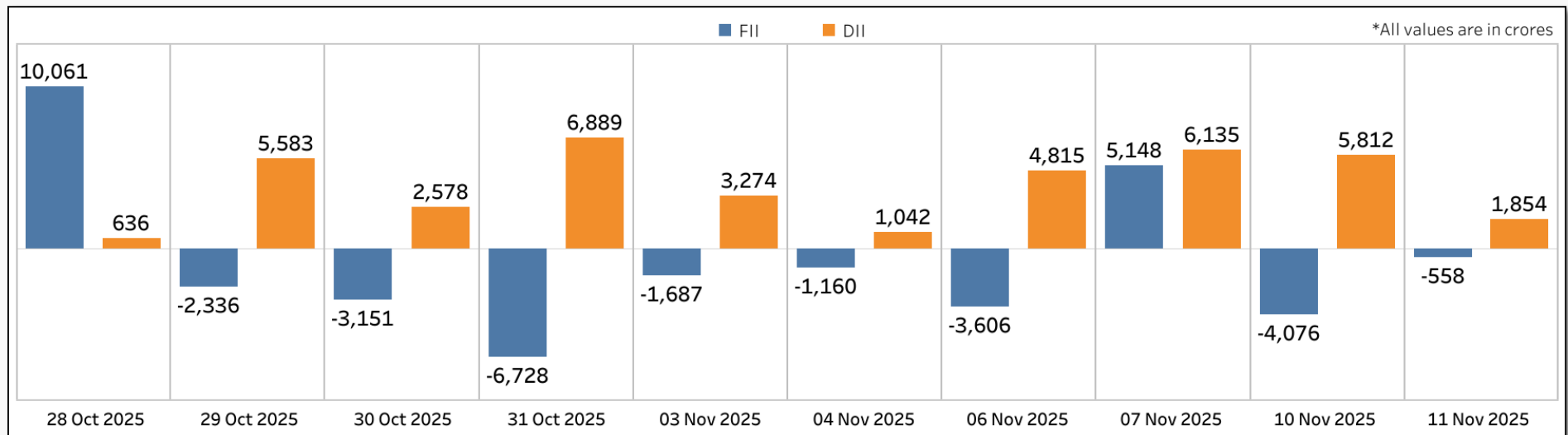
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
35,532 ▲	1,493 ▲	-3,240 ▼	-2,783 ▼	0	158 ▲	-6,050 ▼	16,109 ▲
12,880				0	29	1,050	
							
Net O/S 1,836 Today Prev Day	Net O/S -159,830 Today Prev Day	Net O/S 224,249 Today Prev Day	Net O/S 1,258,142 Today Prev Day	Net O/S 1,381 Today Prev Day	Net O/S 38,841 Today Prev Day	Net O/S 16,977 Today Prev Day	Net O/S -4,475,560 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-97,130 ▼	5,965 ▲	-12,986 ▼	-6,719 ▼	61,598 ▲	-7,616 ▼	22,278 ▲	-6,607 ▼
66,581				17,669	5,633	88	14,757
							
Net O/S 20,734 Today Prev Day	Net O/S 113,284 Today Prev Day	Net O/S -324,835 Today Prev Day	Net O/S 2,640,862 Today Prev Day	Net O/S -23,951 Today Prev Day	Net O/S 7,705 Today Prev Day	Net O/S 83,609 Today Prev Day	Net O/S 576,556 Today Prev Day

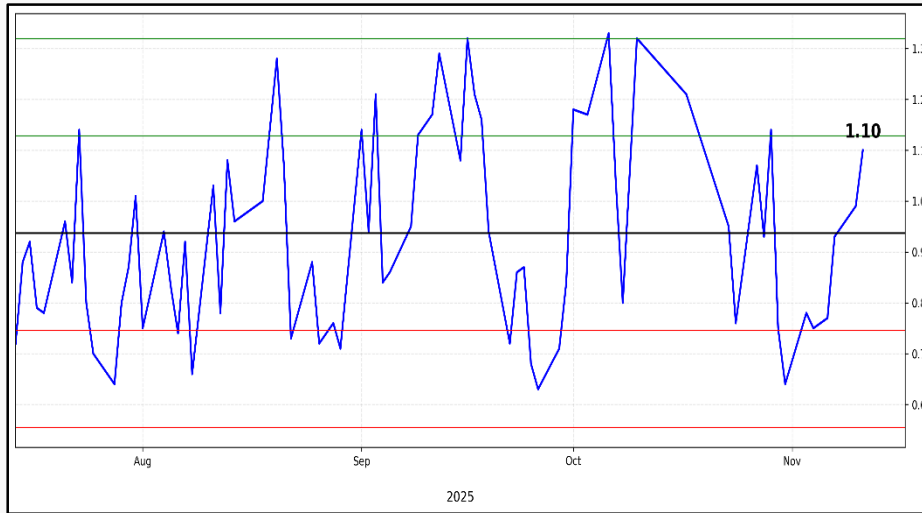
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



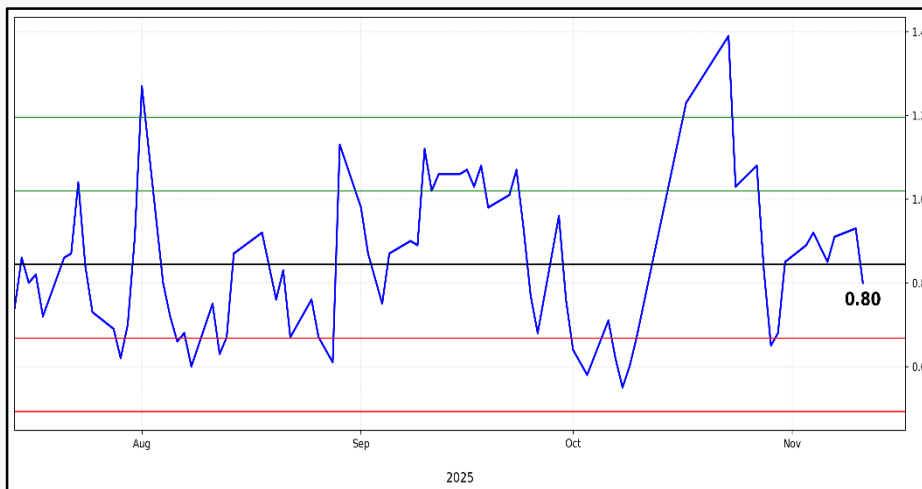
Nifty



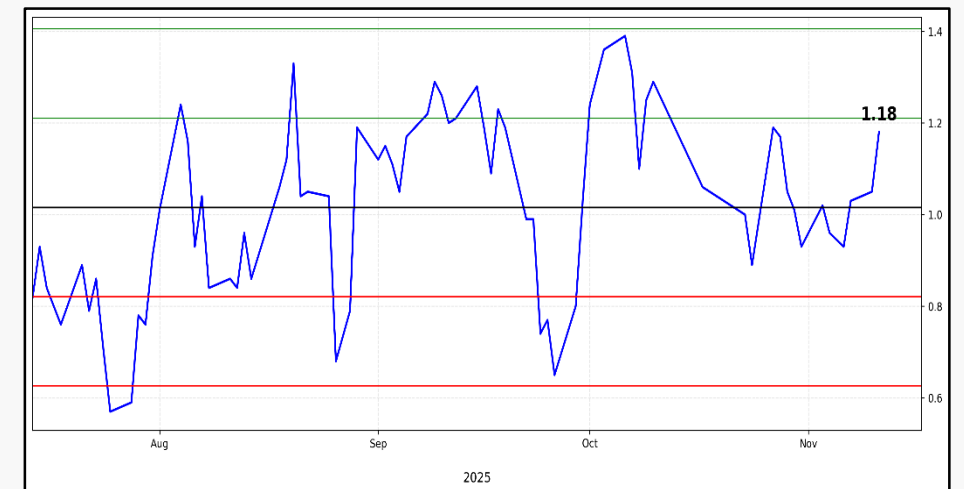
Bank Nifty



Fin Nifty

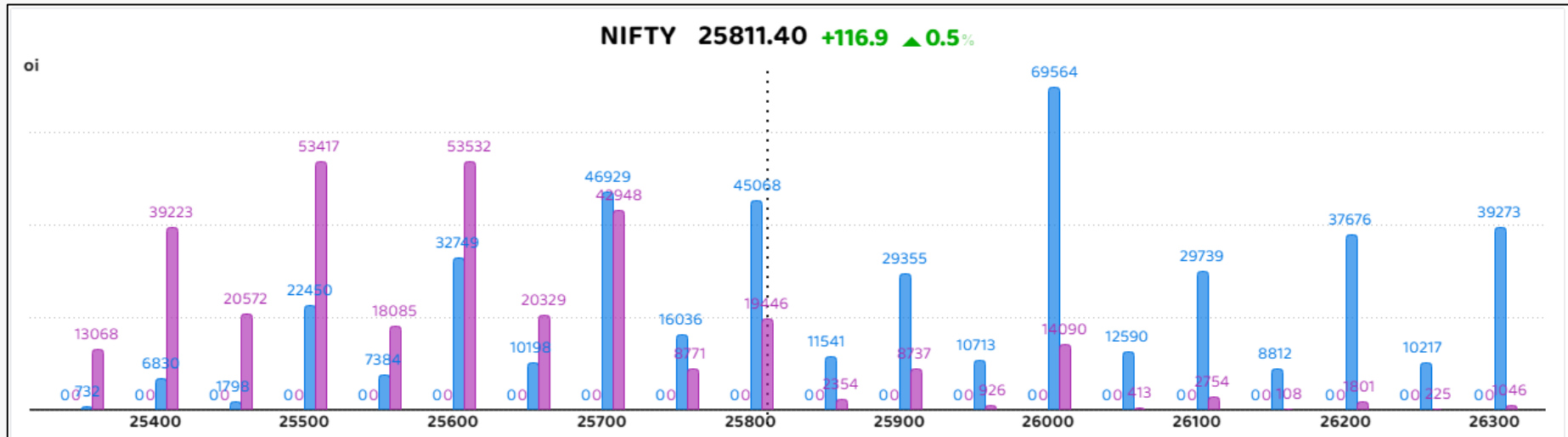


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,500 Call and the 58,500 Put saw the most amount of open interest.

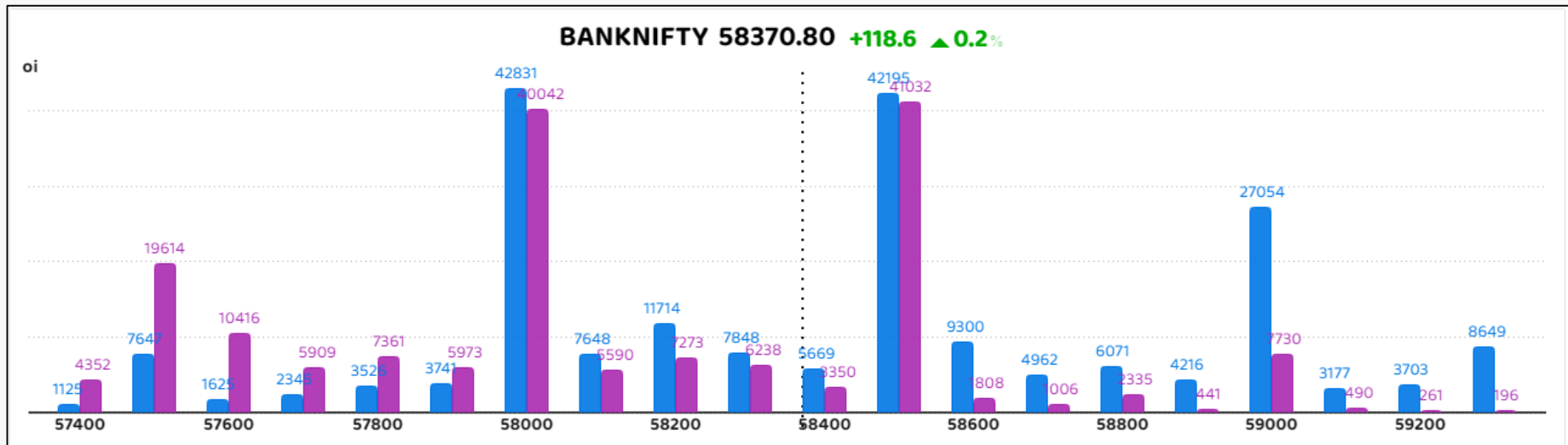
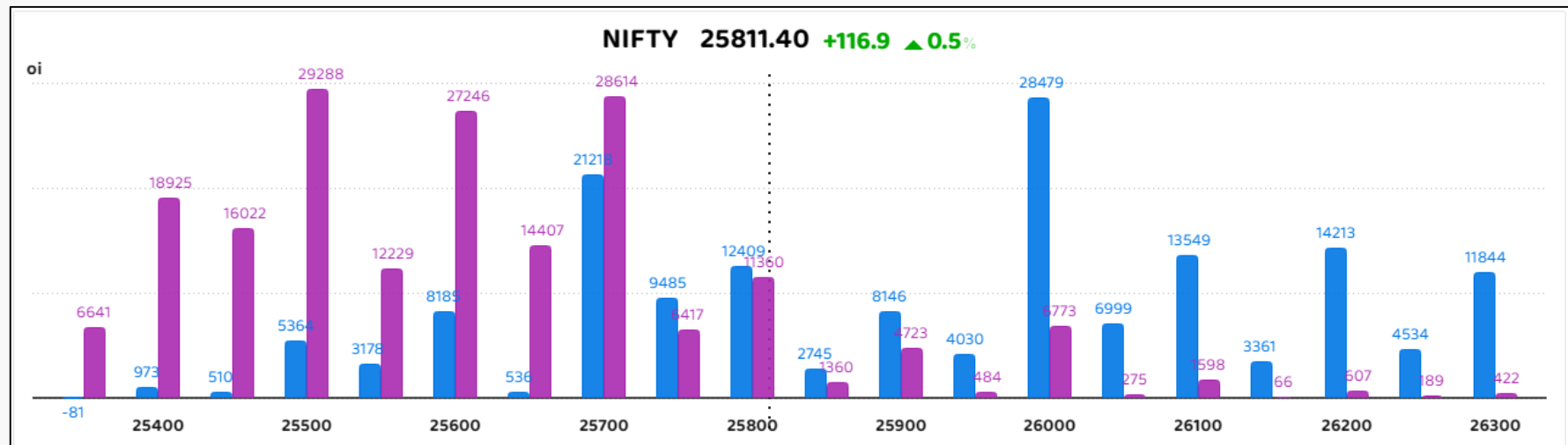


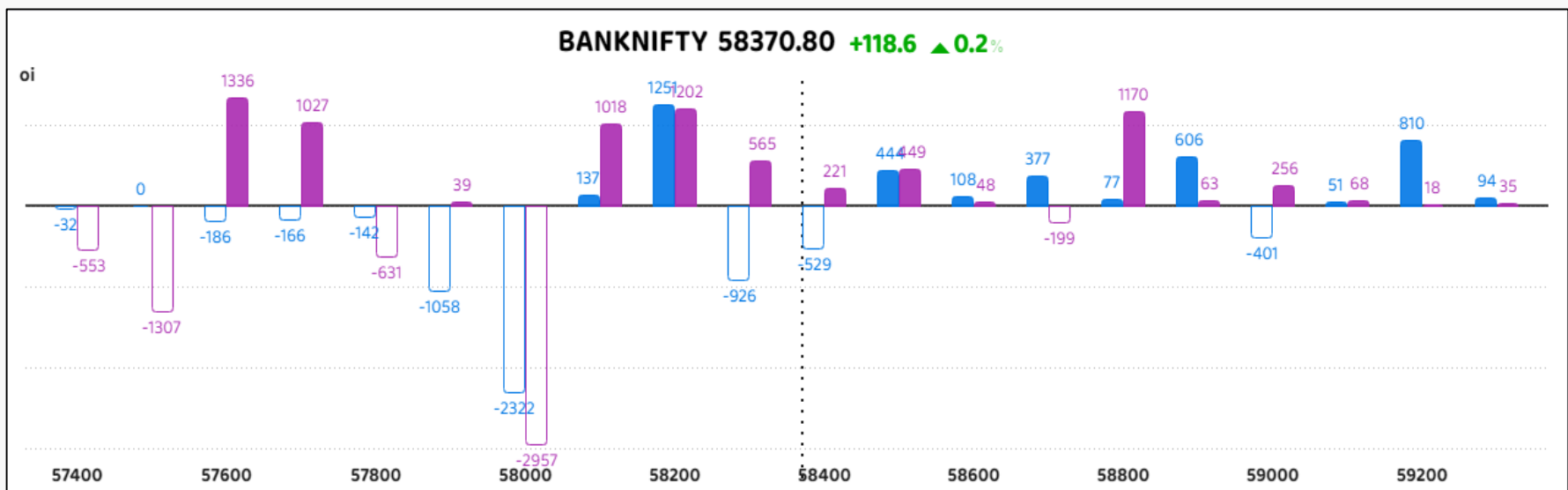
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call  Put 



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,000 Call & the 58,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	36680.0	-1.6	25.5	36.2	2.1	68.6
VOLTAS LTD	1303.8	-2.8	35.8	46.9	16.9	62.9
SHREE CEMENT	27035.0	-0.2	21.4	31.9	7.9	56.5
ICICI LOMBARD GE	1996.1	-1.5	22.6	38.2	3.2	55.3
CANARA BANK	140.9	-0.1	27.4	44.7	6.6	54.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INTERGLOBE AVIAT	5782.5	3.5	20.4	43.2	20.4	0.0
CHOLAMANDALAM IN	1741.8	-0.7	20.3	47.2	20.3	0.0
LIC HOUSING FIN	571.5	0.0	19.2	41.9	19.1	0.4
GODREJ PROPERTIE	2158.5	-0.4	28.9	53.2	28.7	1.1
MAHINDRA & MAHIN	3749.1	2.3	23.2	43.5	22.9	1.5

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
FORTIS HEALTHCAR	986.9	-0.6	31.2	36.0	21.3	92.1
INDRAPRASTHA GAS	208.29	-0.3	38.9	63.7	24.2	78.2
ASHOK LEYLAND	146.04	2.6	32.2	56.0	22.0	73.2
VOLTAS LTD	1303.8	-2.8	35.8	46.9	16.9	71.1
JUBILANT FOODWOR	580.05	-0.7	32.2	75.6	17.0	67.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INTERGLOBE AVIAT	5782.5	3.5	20.4	43.2	20.4	0.0
MAZAGON DOCK SHI	2752.5	1.7	32.7	48.4	32.7	0.0
CHOLAMANDALAM IN	1741.8	-0.7	20.3	47.2	20.3	0.0
ONE 97 COMMUNICA	1332.6	0.1	33.1	59.8	33.1	0.0
TRENT LTD	4315.8	0.8	27.0	61.0	8.5	0.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SBICARD	863.4	-1.3	11,401.0	2,299.0	5.0
POWERGRID	267.6	-0.2	17,265.0	3,647.0	4.7
TECHM	1,408.0	0.7	11,391.0	2,461.0	4.6
PERSISTENT	6,031.0	2.8	73,018.0	17,069.0	4.3
LODHA	1,221.0	1.2	4,296.0	1,021.0	4.2

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SHRIRAMFIN	832.3	1.4	29,826.0	34,492.0	1.2
NUVAMA	7,346.5	-1.6	6,342.0	5,578.0	0.9
ASTRAL	1,555.8	-0.8	5,122.0	4,188.0	0.8
LTF	295.0	-1.9	17,795.0	14,267.0	0.8
AUBANK	889.4	-2.8	12,882.0	10,043.0	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BAJAJFINSV	1,989.4	-6.1	41,832.0	35,716.0	100.0
BANDHANBNK	150.9	-1.0	23,917.0	23,266.0	100.0
BLUESTARCO	1,780.1	0.5	8,982.0	8,767.0	100.0
CROMPTON	279.1	-0.4	12,422.0	12,029.0	100.0
ETERNAL	305.8	1.4	44,317.0	42,973.0	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	7,144.5	1.8	8,845.0	8,842.0	100.0
BAJAJFINSV	1,989.4	-6.1	19,789.0	19,432.0	100.0
NMDC	75.8	0.9	12,017.0	11,915.0	100.0
PFC	375.0	-0.6	21,852.0	21,435.0	100.0
POWERINDIA	21,854.0	2.6	6,672.0	6,096.0	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BAJAJFINSV	1,989.4	-6.1	177,046.0	140,462.0	100.0
IDEA	10.2	7.8	71,247.0	90,380.0	78.8
SOLARINDS	13,788.0	2.8	85,717.0	114,895.0	74.6
BHEL	285.8	4.6	96,604.0	142,186.0	67.9
HUDCO	230.7	-1.3	37,747.0	57,023.0	66.2

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BAJAJFINSV	1,989.4	-6.1	99,851.0	73,632.0	100.0
BHEL	285.8	4.6	54,704.0	84,898.0	64.4
BHARATFORG	1,402.1	5.5	46,902.0	75,301.0	62.3
BAJFINANCE	1,005.2	-7.4	126,051.0	209,892.0	60.1
UNOMINDA	1,311.1	-0.6	5,707.0	10,424.0	54.7

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BLUESTARCO	1,780.1	0.5	8,982.0	2,605.0	3.4
BAJAJFINSV	1,989.4	-6.1	41,832.0	12,821.0	3.3
POWERINDIA	21,854.0	2.6	5,733.0	1,943.0	2.9
BAJFINANCE	1,005.2	-7.4	59,509.0	22,280.0	2.7
AMBER	7,144.5	1.8	17,895.0	6,738.0	2.7

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POWERINDIA	21,854.0	2.6	6,672.0	1,378.0	4.8
TORNTPHARM	3,825.8	0.2	4,427.0	1,508.0	2.9
AMBER	7,144.5	1.8	8,845.0	3,619.0	2.4
SHRIRAMFIN	832.3	1.4	24,340.0	11,581.0	2.1
BAJAJFINSV	1,989.4	-6.1	19,789.0	9,424.0	2.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SOLARINDS	13,788.0	2.8	85,717.0	6,430.0	13.3
BAJAJFINSV	1,989.4	-6.1	177,046.0	17,157.0	10.3
BHARATFORG	1,402.1	5.5	101,094.0	11,211.0	9.0
BRITANNIA	5,950.5	-3.0	100,199.0	13,535.0	7.4
BAJFINANCE	1,005.2	-7.4	216,335.0	32,233.0	6.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BAJAJFINSV	1,989.4	-6.1	99,851.0	9,621.0	10.4
BHARATFORG	1,402.1	5.5	46,902.0	4,718.0	9.9
BRITANNIA	5,950.5	-3.0	64,575.0	7,073.0	9.1
SOLARINDS	13,788.0	2.8	22,811.0	2,772.0	8.2
BAJFINANCE	1,005.2	-7.4	126,051.0	21,920.0	5.8

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	2435100	5.6%	2367	2500	2453100	5.6%	JIOFIN	310	9778350	1.7%	305	310	6051250	1.7%
ADANIPTS	1500	1707150	1.7%	1474	1400	1201275	-5.0%	JSWSTEEL	1200	1159650	0.7%	1192	1100	623700	-7.7%
APOLLOHOSP	8000	296750	6.7%	7501	7000	116250	-6.7%	KOTAKBANK	2200	2254000	5.4%	2087	2100	1002000	0.6%
ASIANPAINT	2600	742250	-2.2%	2657	2600	602250	-2.2%	LT	4000	969850	1.1%	3955	3900	405650	-1.4%
AXISBANK	1300	1716250	6.3%	1223	1140	1020625	-6.7%	M&M	3800	570800	1.4%	3749	3600	618000	-4.0%
BAJAJ-AUTO	9000	203175	1.2%	8895	8800	129750	-1.1%	MARUTI	16500	489350	5.5%	15645	15000	202200	-4.1%
BAJAJFINSV	2100	1446000	5.6%	1989	2000	655250	0.5%	MAXHEALTH	1200	753900	9.5%	1095	1120	259350	2.2%
BAJFINANCE	1100	7527000	9.4%	1005	1000	2493750	-0.5%	NESTLEIND	1300	2201500	2.5%	1268	1200	228500	-5.4%
BEL	430	7800450	0.6%	427	410	4800825	-4.0%	NTPC	350	8563500	7.1%	327	300	2736000	-8.2%
BHARTIARTL	2100	4156250	2.8%	2042	2000	1861050	-2.1%	ONGC	260	16737750	4.2%	249	250	2295000	0.2%
CIPLA	1600	1930500	5.6%	1515	1500	627375	-1.0%	POWERGRID	290	8082600	8.4%	268	270	2682800	0.9%
COALINDIA	389.75	5699700	1.8%	383	439.75	2115450	14.9%	RELIANCE	1500	11742500	0.4%	1493	1500	4638500	0.4%
DRREDDY	1300	3028750	7.3%	1212	1200	680000	-0.9%	SBILIFE	2020	2291250	1.1%	1997	1900	798750	-4.9%
EICHERMOT	7000	223475	1.8%	6873	6200	211050	-9.8%	SBIN	970	5102250	1.8%	953	900	4270500	-5.6%
ETERNAL	330	14334175	7.9%	306	300	5347125	-1.9%	SHRIRAMFIN	800	1669800	-3.9%	832	750	2227500	-9.9%
GRASIM	3000	987750	8.1%	2776	2800	247500	0.9%	SUNPHARMA	1720	817250	0.2%	1716	1660	453250	-3.3%
HCLTECH	1600	996800	1.9%	1570	1400	931350	-10.8%	TATACONSUM	1200	968550	3.8%	1156	1100	327250	-4.9%
HDFCBANK	1000	7873800	0.8%	992	1000	2737900	0.8%	TMPV	450	6024000	10.4%	408	400	2883200	-1.9%
HDFCLIFE	810	1732500	6.0%	764	750	964700	-1.8%	TATASTEEL	185	28814500	2.2%	181	180	13326500	-0.6%
HINDALCO	800	3756900	0.8%	794	800	2466800	0.8%	TCS	3100	2170000	1.7%	3047	3000	1065925	-1.5%
HINDUNILVR	2600	2184300	7.1%	2428	2500	698100	3.0%	TECHM	1500	1107000	6.5%	1408	1300	530400	-7.7%
ICICIBANK	1400	8659700	3.1%	1358	1400	3004400	3.1%	TITAN	3800	562975	-0.3%	3812	3700	410725	-2.9%
INDIGO	6000	317250	3.8%	5783	5600	244800	-3.2%	TRENT	4800	1044200	11.2%	4316	4300	515700	-0.4%
INFY	1600	3550000	4.6%	1530	1500	2237600	-2.0%	ULTRACEMCO	12000	122250	1.5%	11825	11000	62600	-7.0%
ITC	420	9460800	3.2%	407	410	3643200	0.8%	WIPRO	250	13107000	3.4%	242	240	7332000	-0.7%

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

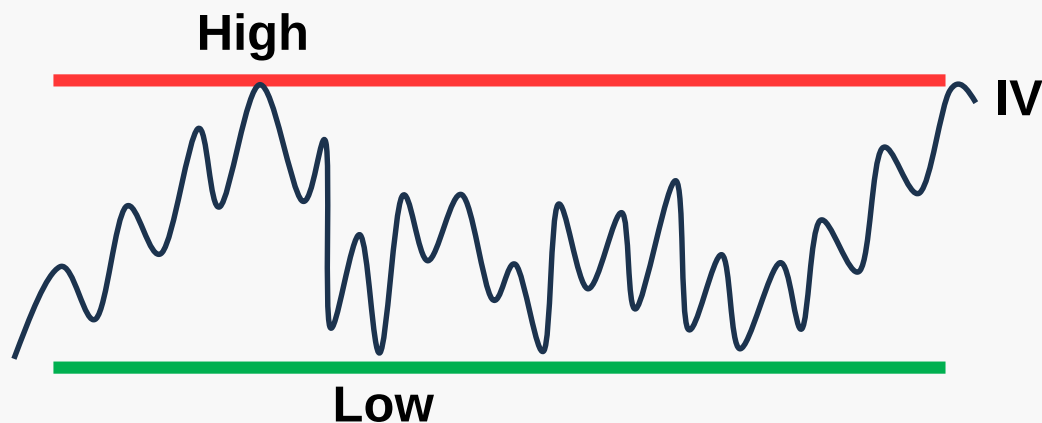
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

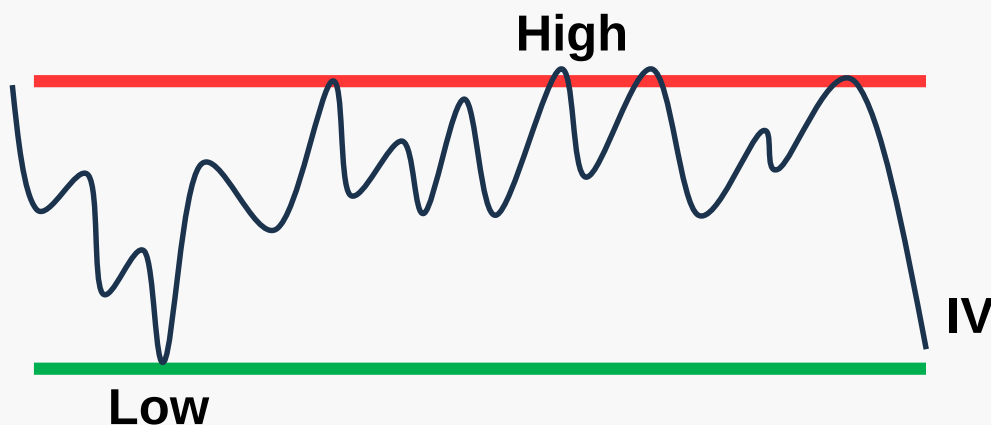
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

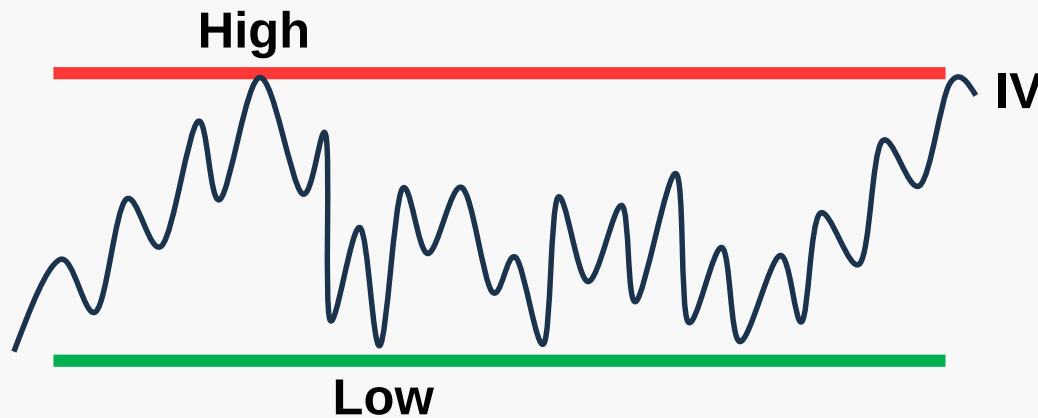


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

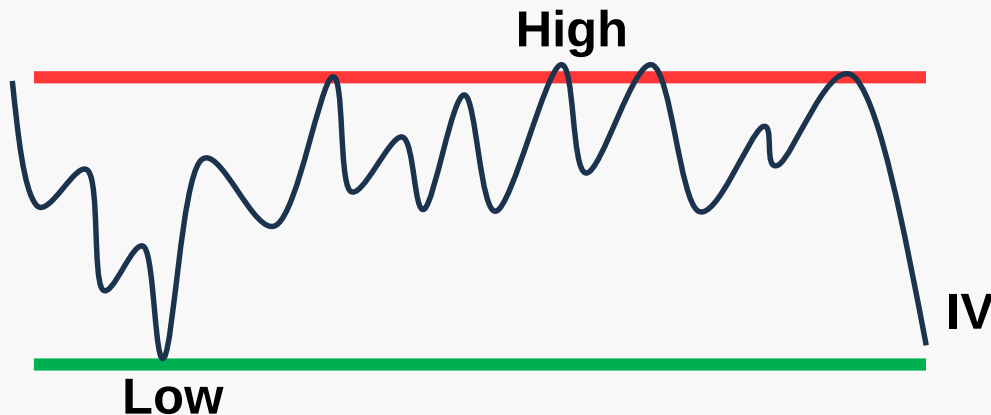


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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