



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,455	0.6%▲
Open Interest (OI)	1,51,69,960	1.4%▼
Change in OI (abs)	1,51,69,960	2,09,755▼
Premium / Discount (Abs)	127	17▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	60,341	0.6%▲
Open interest (OI)	15,00,660	5.7%▲
Change in OI (abs)	15,00,660	80,940▲
Premium / Discount (Abs)	190	54▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	9.45	0.26▲
Nifty ATM IV (%)	8.41	0.04▲
Bank Nifty ATM IV (%)	9.50	0.08▲
PCR (Nifty)	1.46	0.33▲
PCR (Bank Nifty)	1.18	0.04▲

The FII Long Ratio in Index Futures **jump** to 11.4 %, **up** from 9.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DABUR	2,38,21,250	12.7%	526.4	4.6%
UNOMINDA	47,11,300	12.4%	1329.9	2.6%
SAMMAANCAP	11,22,12,800	11.7%	149.73	3.1%
ANGELONE	39,68,250	7.7%	2394.6	1.2%
SBIN	7,81,14,000	7.3%	1006.45	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
WAAREEENER	9,14,550	235.0%	2866.7	-3.6%
SWIGGY	71,04,500	40.5%	388.7	-1.2%
BAJAJHLDNG	79,300	29.7%	11243	-1.6%
PREMIERENE	9,18,275	27.7%	850.5	-0.2%
BAJAJ-AUTO	35,57,250	13.5%	9521.5	-0.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	1,21,50,600	-8.5%	644.45	3.7%
JSWENERGY	4,02,30,000	-4.7%	512.45	1.5%
NTPC	8,39,01,000	-4.2%	352.3	4.5%
NHPC	6,93,44,000	-3.7%	83.88	4.8%
TATATECH	1,18,94,400	-3.6%	659.95	1.9%

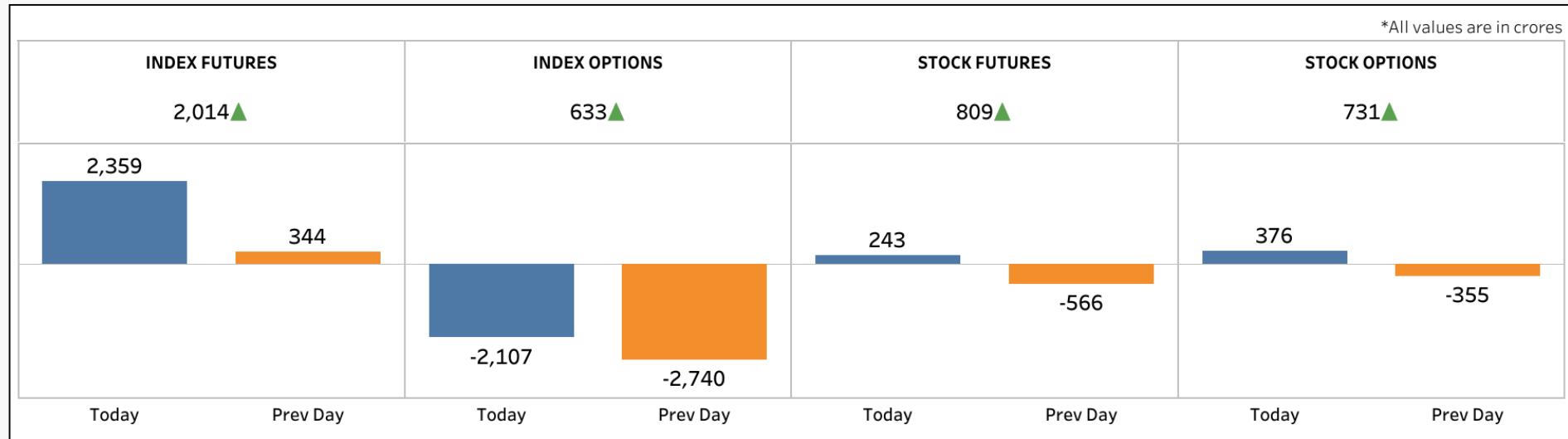
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	4,59,03,125	-2.8%	265.7	-0.3%
SAIL	20,18,55,600	-2.6%	149.08	-0.2%
LTIM	20,38,350	-2.5%	6102.5	-0.4%
ULTRACEMCO	29,92,050	-1.5%	11941	-0.1%
TITAN	97,06,725	-1.2%	4066.2	-0.2%

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

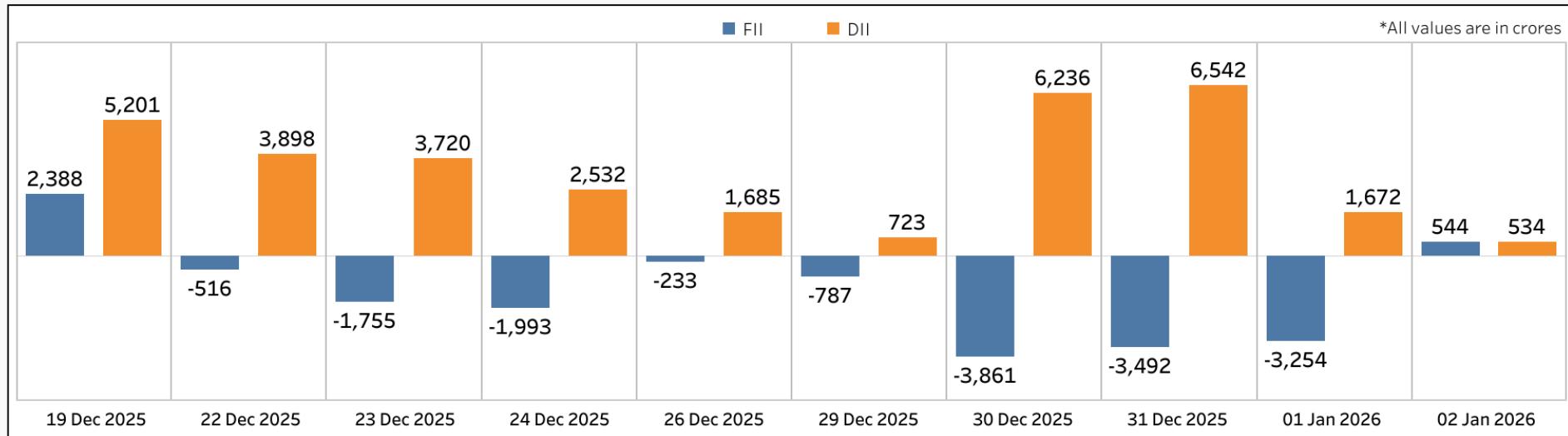
Open Interest Trends by Participant

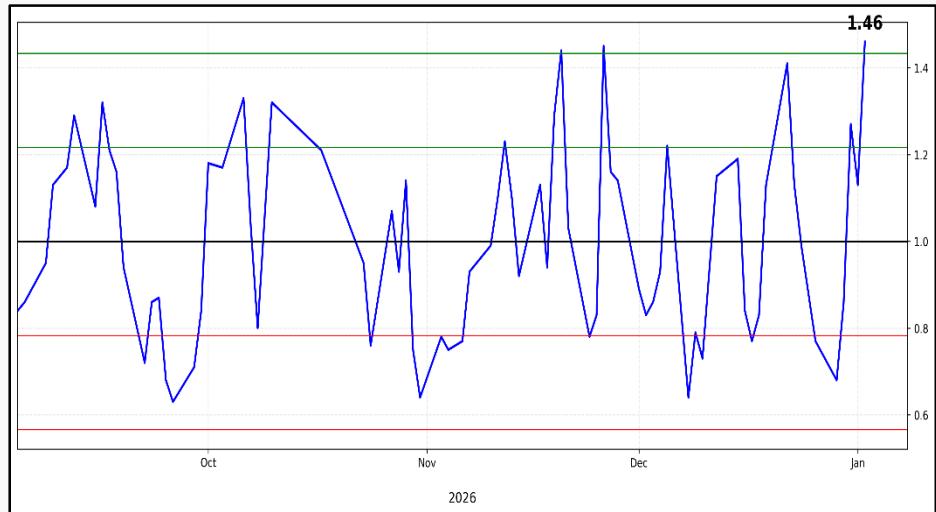
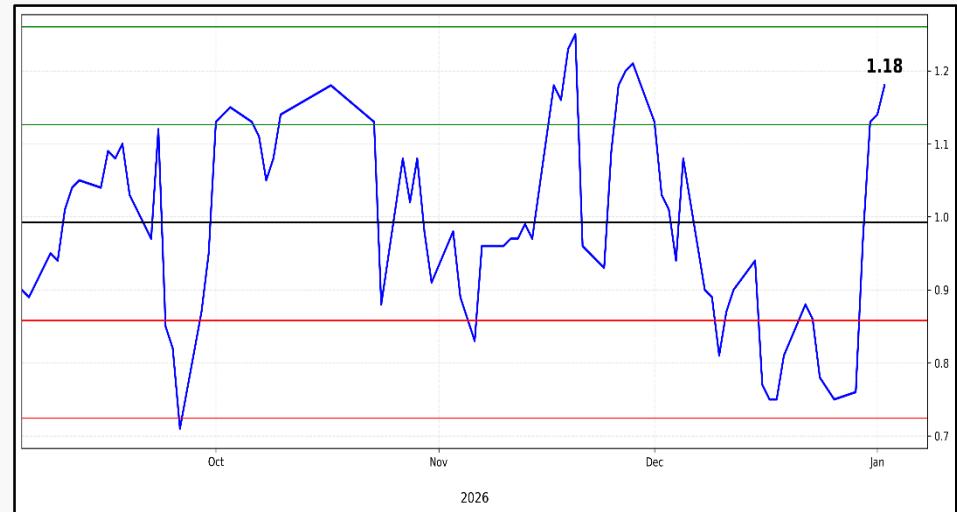
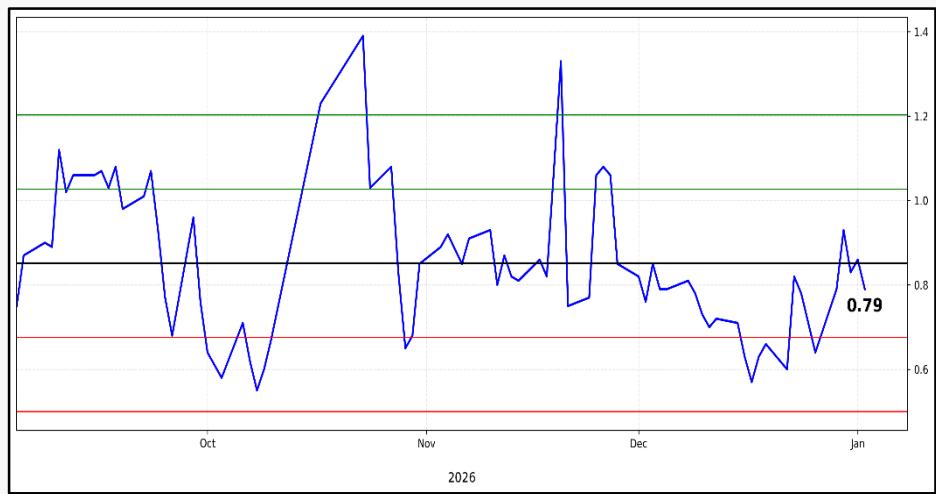
▲ and ▼ indicate positive and negative absolute changes, respectively

Daily Net Open Interest Change



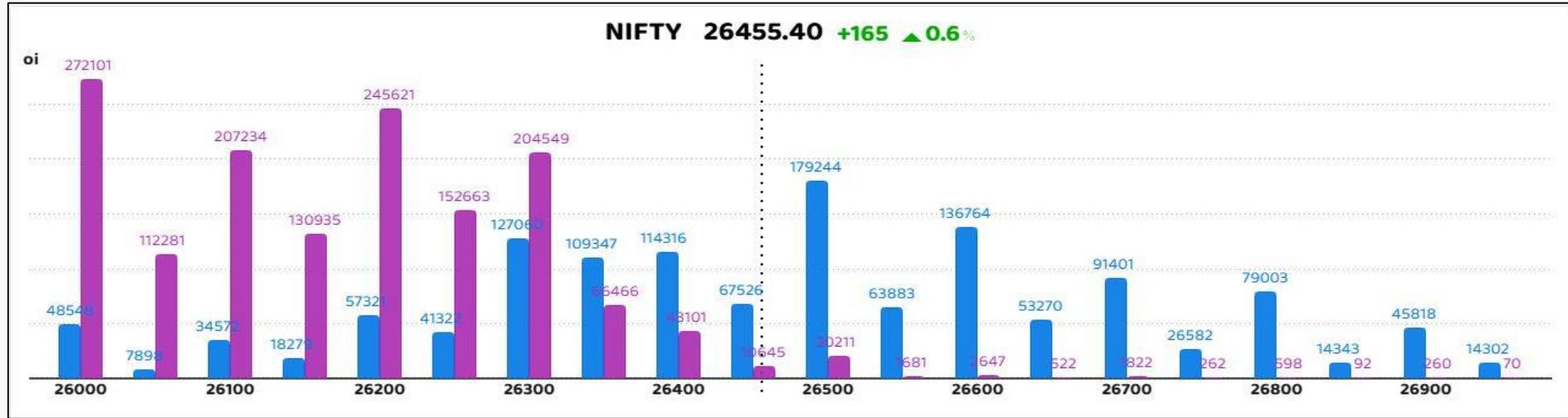
DII and FII Daily Cash Market Flows



Nifty

Bank Nifty

Fin Nifty

Midcap Select Nifty


On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation

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

 Call  Put 


For Nifty, the 26,500 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.

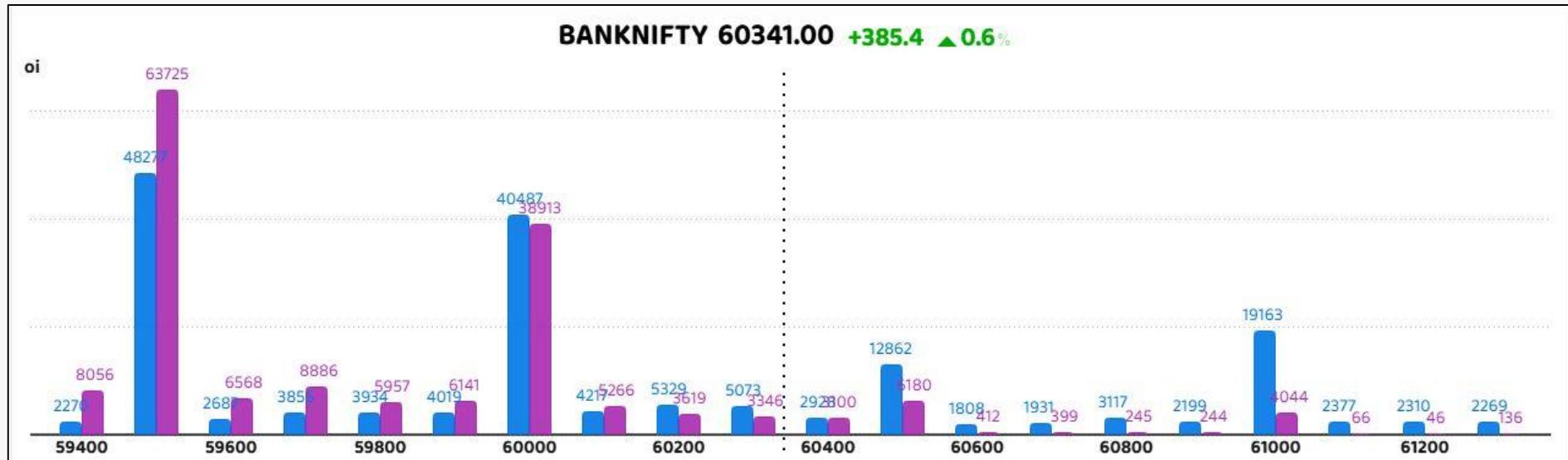
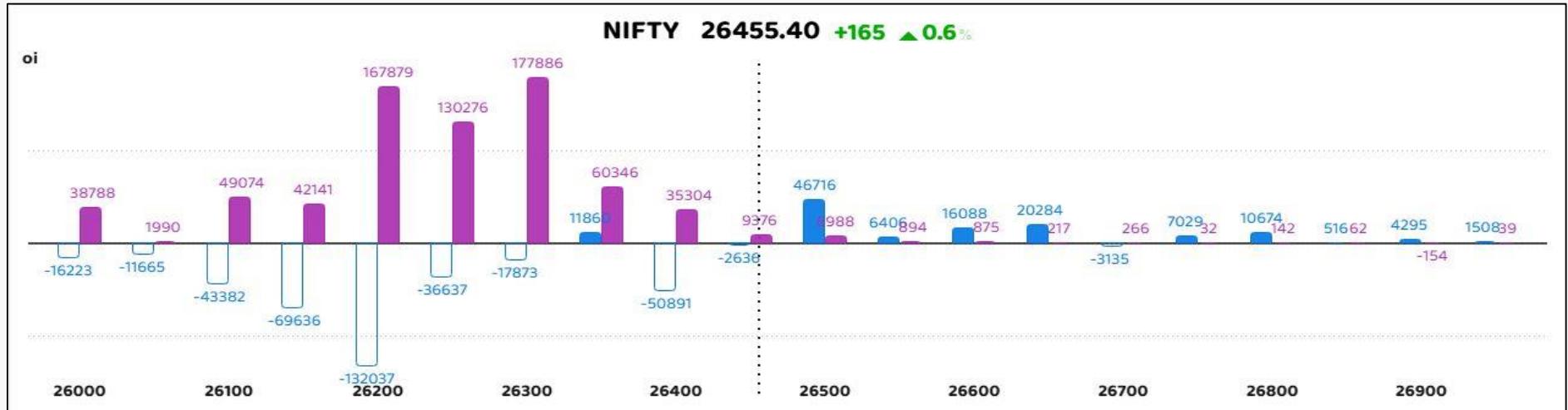


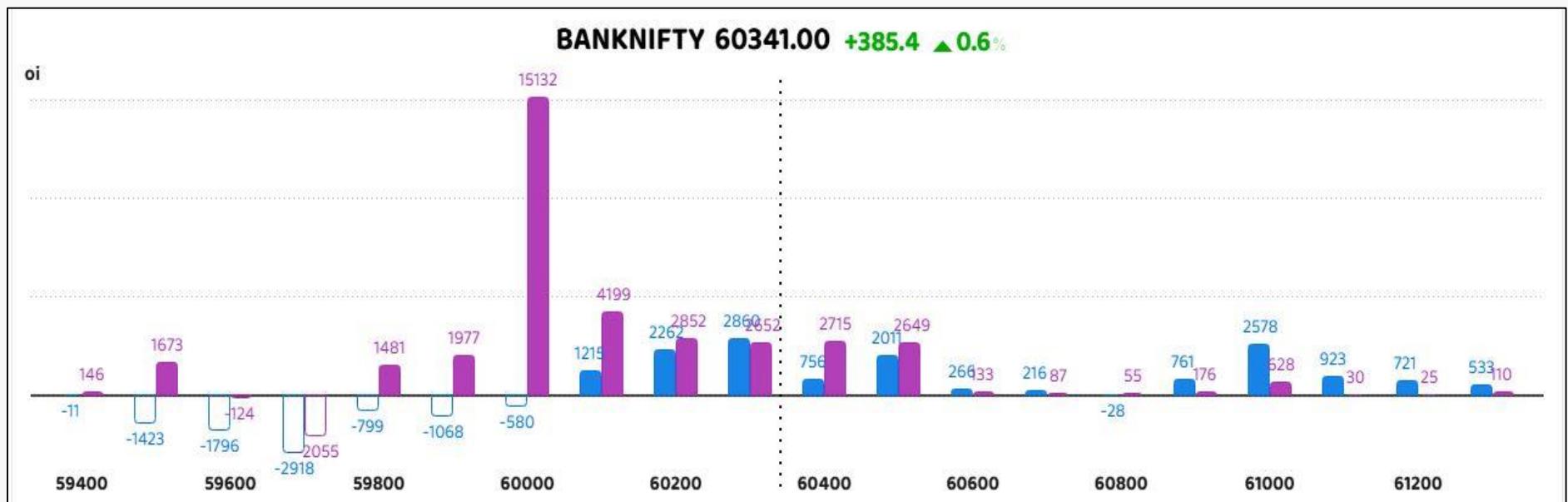
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

 Call 

 Put 


The largest open interest changes (contracts) were seen at the 26,200 Call and the 26,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,600 Call & the 60,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	39,420.0	9.1	47.1	47.1	2.1	100.0
ITC LTD	350.1	-3.8	24.6	34.0	1.0	71.4
DIXON TECHNOLOGI	12,165.0	0.6	40.0	53.1	9.2	70.2
COAL INDIA LTD	427.9	6.9	24.3	38.8	1.9	60.6
HINDUSTAN UNILEV	2,348.0	1.1	15.9	25.8	0.8	60.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TATA POWER CO	393.1	2.9	18.2	48.7	18.0	0.7
GAIL INDIA LTD	175.4	2.1	20.9	91.4	19.4	2.1
NTPC LTD	352.1	4.7	17.9	116.6	14.9	2.9
ADANI PORTS AND	1,489.5	0.6	21.4	99.7	19.0	3.0
LUPIN LTD	2,105.3	0.1	19.9	40.7	19.1	3.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BOSCH LTD	39,420.0	9.1	47.1	47.1	2.1	100.0
HFCL LTD	67.7	-1.7	59.3	89.4	32.2	98.5
RAIL VIKAS NIGAM	365.9	1.2	46.4	52.8	21.0	96.3
ITC LTD	350.1	-3.8	24.6	34.0	1.0	92.8
HINDUSTAN ZINC	628.8	2.8	39.8	54.2	21.8	90.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA POWER CO	393.1	2.9	18.2	48.7	18.0	0.6
PHOENIX MILLS	1,903.4	1.6	22.4	64.3	15.0	0.9
LUPIN LTD	2,105.3	0.1	19.9	40.7	19.1	1.1
SAMVARDHANA MOTH	122.0	-0.4	27.2	59.6	24.8	1.2
SONA BLW PRECISI	486.4	2.5	28.8	57.8	22.5	2.2

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
OBEROIRLTY	1,730.0	2.0	8,471	1,474	5.7
IRCTC	694.8	1.3	23,474	4,602	5.1
DIVISLAB	6,392.5	0.8	8,199	1,614	5.1
IREDA	146.6	5.2	28,651	6,233	4.6
IRFC	128.5	2.1	17,788	4,041	4.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
TATACONSUM	1,170.7	-0.5	4,851	5,010	1.0
GODREJCP	1,235.2	-0.7	2,619	2,495	1.0
DRREDDY	1,256.1	0.2	11,271	9,863	0.9
INDIGO	5,106.0	-0.1	13,884	10,927	0.8
SBIN	999.0	1.4	77,476	56,815	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ITC	350.0	-3.8	1,91,832	1,14,510	100.0
SWIGGY	387.2	0.0	2,080	0	100.0
WAAREENER	2,866.3	0.0	4,754	0	100.0
NMDC	84.5	1.0	17,933	22,779	78.7
LTF	319.8	0.8	8,684	11,524	75.4

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ITC	350.0	-3.8	81,788	58,511	100.0
SWIGGY	387.2	0.0	1,430	0	100.0
WAAREENER	2,866.3	0.0	1,597	0	100.0
PFC	376.0	3.5	20,132	24,848	81.0
IDEA	11.8	1.6	21,953	27,998	78.4

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
COALINDIA	427.9	6.9	2,06,216	1,81,040	100.0
SWIGGY	387.2	0.0	3,173	0	100.0
WAAREENER	2,866.3	0.0	10,812	0	100.0
BOSCHLTD	39,420.0	9.1	1,76,105	1,86,568	94.4
ITC	350.0	-3.8	4,42,001	4,98,394	88.7

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
SWIGGY	387.2	0.0	1,279	0	100.0
WAAREENER	2,866.3	0.0	5,531	0	100.0
COALINDIA	427.9	6.9	68,739	85,748	80.2
BOSCHLTD	39,420.0	9.1	46,517	65,726	70.8
ITC	350.0	-3.8	2,66,101	4,36,333	61.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
WAAREEENER	2,866.3	0.0	4,754	0	4,754,000,000.0
SWIGGY	387.2	0.0	2,080	0	2,080,000,000.0
ITC	350.0	-3.8	1,91,832	40,184	4.8
BOSCHLTD	39,420.0	9.1	7,782	4,839	1.6
COALINDIA	427.9	6.9	28,836	19,224	1.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
WAAREEENER	2,866.3	0.0	1,597	0	1,597,000,000.0
SWIGGY	387.2	0.0	1,430	0	1,430,000,000.0
BOSCHLTD	39,420.0	9.1	7,334	2,072	3.5
ITC	350.0	-3.8	81,788	26,007	3.1
COALINDIA	427.9	6.9	19,477	15,170	1.3

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
WAAREENER	2,866.3	0.0	10,812	0	10,812,000,000.0
SWIGGY	387.2	0.0	3,173	0	3,173,000,000.0
BOSCHLTD	39,420.0	9.1	1,76,105	9,591	18.4
ITC	350.0	-3.8	4,42,001	50,139	8.8
COALINDIA	427.9	6.9	2,06,216	28,953	7.1

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
WAAREENER	2,866.3	0.0	5,531	0	5,531,000,000.0
SWIGGY	387.2	0.0	1,279	0	1,279,000,000.0
BOSCHLTD	39,420.0	9.1	46,517	2,890	16.1
ITC	350.0	-3.8	2,66,101	34,796	7.6
DABUR	522.6	4.5	20,638	3,286	6.3

Call and put volume refers to the number of contracts that have been traded in the most recently concluded session
 Only looks at stocks with volumes more than 1000 contracts

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	2300	1339824	0.9%	2280	2200	1086753	-3.5%	JIOFIN	300	6415500	-0.6%	302	290	6488350	-3.9%
ADANIPORTS	1500	1428800	0.7%	1490	1500	740525	0.7%	JSWSTEEL	1160	909900	-1.8%	1181	1100	2110050	-6.8%
APOLLOHOSP	7200	209375	1.0%	7130	7100	130125	-0.4%	KOTAKBANK	2200	922000	0.2%	2195	2200	495600	0.2%
ASIANPAINT	2800	574750	1.0%	2773	2520	332000	-9.1%	LT	4200	441700	0.9%	4163	4000	327425	-3.9%
AXISBANK	1300	4381875	2.6%	1267	1260	1286875	-0.5%	M&M	3800	556000	-0.1%	3802	3600	301000	-5.3%
BAJAJ-AUTO	10000	193725	5.2%	9503	9000	98100	-5.3%	MARUTI	17000	168000	0.2%	16960	16000	169650	-5.7%
BAJAJFINSV	2100	662000	3.0%	2038	1900	393000	-6.8%	MAXHEALTH	1060	417375	-0.2%	1063	1040	391125	-2.1%
BAJFINANCE	1000	3519000	1.0%	990	1000	2783250	1.0%	NESTLEIND	1300	545000	1.6%	1280	1300	173500	1.6%
BEL	400	7720650	-0.8%	403	400	5621625	-0.8%	NTPC	335	3792000	-4.9%	352	330	2848500	-6.3%
BHARTIARTL	2100	1199850	-0.3%	2106	2100	751925	-0.3%	ONGC	245	9600750	1.5%	241	240	3039750	-0.6%
CIPLA	1500	397125	-0.8%	1512	1500	457125	-0.8%	POWERGRID	270	3594800	-0.4%	271	250	2684700	-7.7%
COALINDIA	430	4554900	0.5%	428	400	3285900	-6.5%	RELIANCE	1600	7771500	0.5%	1592	1550	1626500	-2.7%
DRREDDY	1300	1118125	3.5%	1256	1250	650625	-0.5%	SBILIFE	2240	593250	8.3%	2067	1900	261000	-8.1%
EICHERMOT	8100	167900	10.4%	7335	7200	96200	-1.8%	SBIN	1000	3370500	0.1%	999	980	2536500	-1.9%
ETERNAL	300	6222550	5.6%	284	280	5080375	-1.5%	SHIRIRAMFIN	1000	1928025	-1.0%	1010	900	1857075	-10.9%
GRASIM	2900	217000	1.5%	2856	2740	250000	-4.1%	SUNPHARMA	1760	1266650	1.9%	1728	1620	364000	-6.3%
HCLTECH	1820	646800	11.0%	1640	1600	252700	-2.5%	TATACONSUM	1200	774400	2.5%	1171	1080	1057650	-7.7%
HDFCBANK	1000	4539700	-0.2%	1002	940	3182300	-6.2%	TMPV	400	6769600	8.0%	370	360	3648000	-2.8%
HDFCLIFE	770	1608200	2.0%	755	750	1157200	-0.6%	TATASTEEL	200	15438500	9.4%	183	170	11687500	-7.0%
HINDALCO	1000	1575000	8.0%	926	880	1281000	-4.9%	TCS	3300	2053625	1.5%	3251	3200	699125	-1.6%
HINDUNILVR	2340	891300	-0.3%	2348	2300	581100	-2.0%	TECHM	1800	694800	11.7%	1612	1600	423600	-0.7%
ICICIBANK	1400	5745600	3.3%	1355	1350	3380300	-0.4%	TITAN	4100	495775	1.2%	4052	4000	373100	-1.3%
INDIGO	5500	450600	7.7%	5106	5000	752700	-2.1%	TRENT	4300	408200	-2.5%	4410	4300	252500	-2.5%
INFY	1660	2537200	1.2%	1640	1620	1335200	-1.2%	ULTRACEMCO	12000	94550	0.8%	11899	11500	49200	-3.4%
ITC	400	40289600	14.3%	350	350	19307200	0.0%	WIPRO	265	4344000	-1.5%	269	260	2766000	-3.3%

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

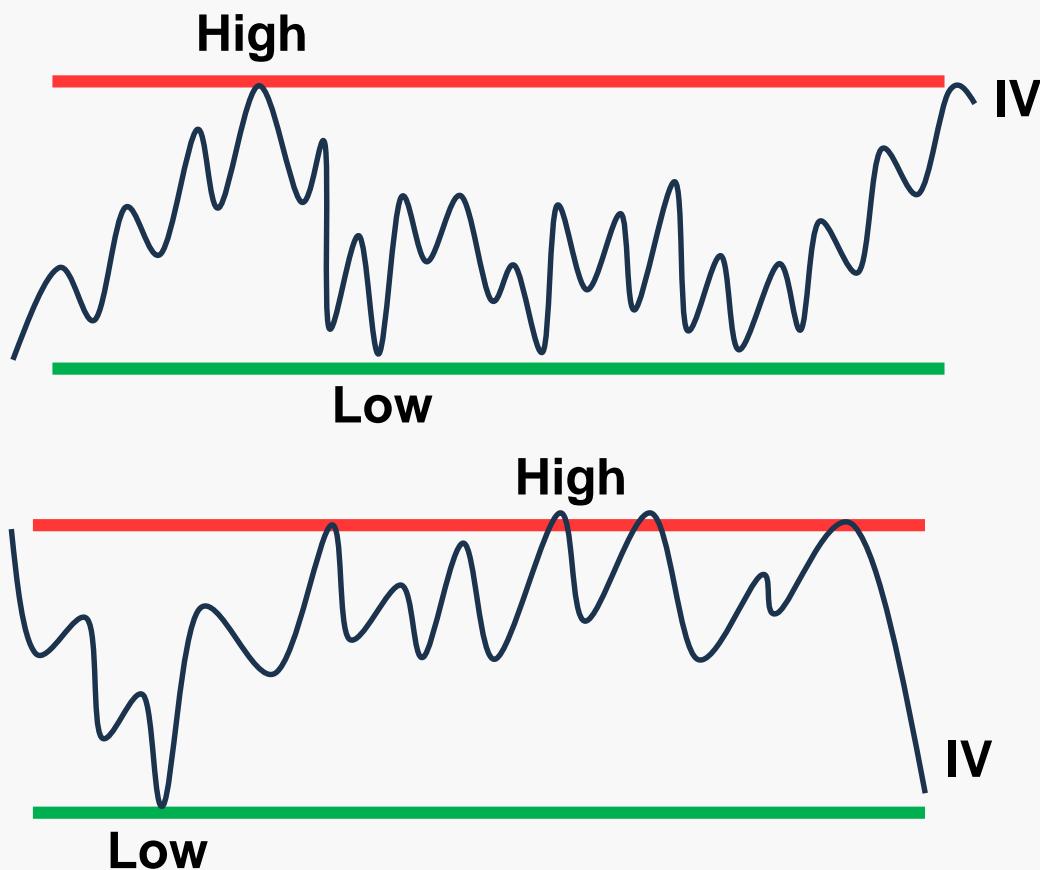
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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

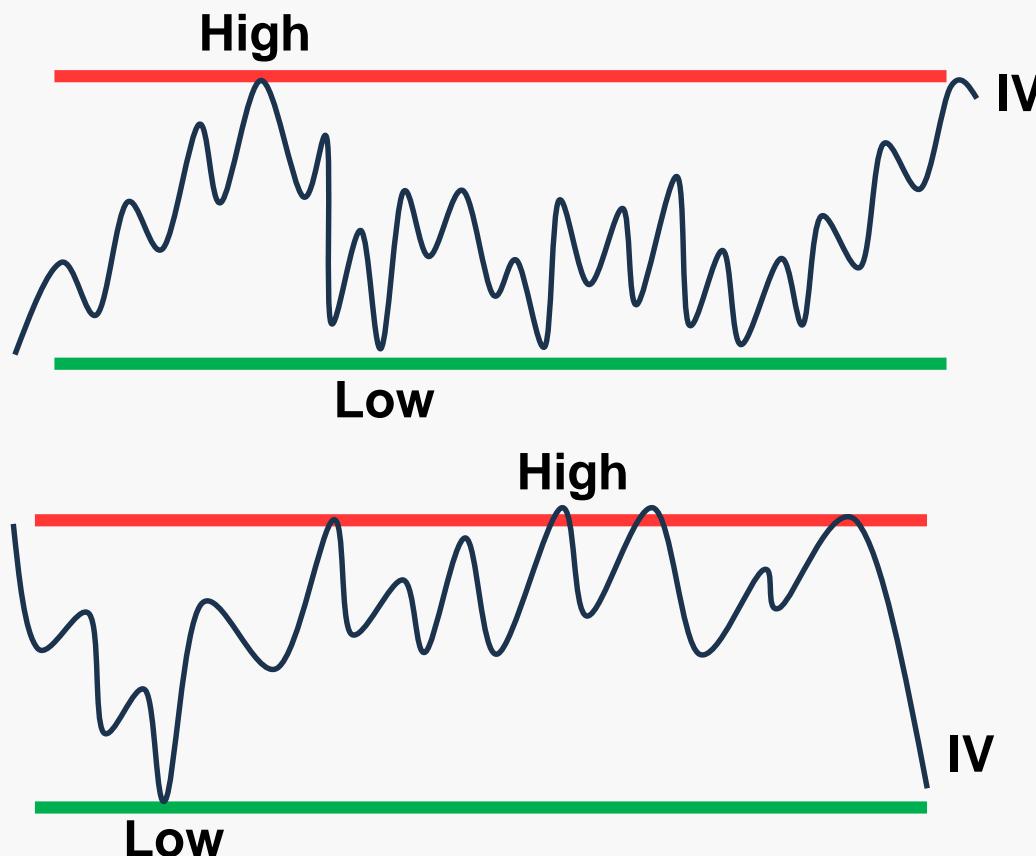
- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions 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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- Distributor for Mutual Funds with AMFI

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