



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	26,136	0.3% ▼
Open Interest (OI)	1,65,08,630	4.6% ▲
Change in OI (abs)	1,65,08,630	7,18,630 ▲
Premium / Discount (Abs)	150	31 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	59,737	0.1% ▲
Open interest (OI)	17,30,355	3.6% ▲
Change in OI (abs)	17,30,355	60,730 ▲
Premium / Discount (Abs)	389	3 ▼
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	11.2	0.0 ▼
Nifty ATM IV (%)	9.10	0.6 ▼
Bank Nifty ATM IV (%)	10.50	0.1 ▼
PCR (Nifty)	0.85	0.02 ▲
PCR (Bank Nifty)	1.00	0.02 ▼

The FII Long Ratio in Index Futures decreased to 14% from 16%.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BIOCON	4,53,25,000	6.1%	412.3	2.5%
FEDERALBNK	6,06,45,000	4.7%	259.6	0.2%
ASHOKLEY	14,04,70,000	4.5%	160.98	0.5%
BLUESTARCO	18,06,025	3.5%	1756.6	0.1%
KPITTECH	34,67,675	1.5%	1,262.80	0.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	39,47,750	26.1%	2607.6	-5.3%
POWERINDIA	2,50,800	15.8%	21835	-4.0%
SHRIRAMFIN	5,98,30,650	7.2%	833.35	-1.8%
KFINTECH	35,25,100	7.1%	1077.6	-1.0%
ADANIENIT	2,09,78,937	6.0%	2202.2	-2.4%

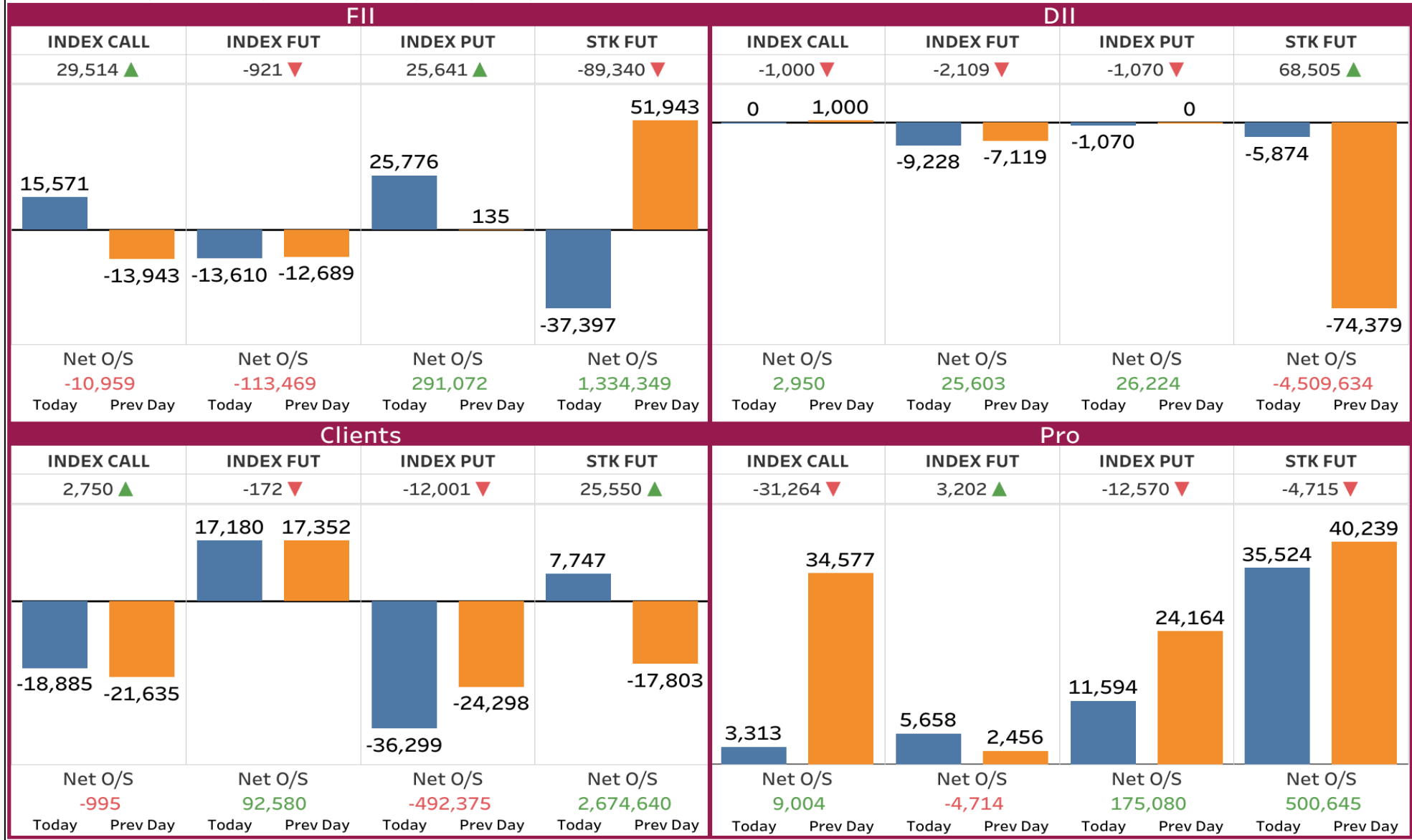
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IEX	5,94,22,500	-5.0%	149.45	0.2%
NATIONALUM	6,70,35,000	-4.2%	267.2	0.4%
IOC	8,86,61,625	-2.8%	163.13	0.9%
OBEROIRLT	42,76,650	-2.5%	1640.4	0.6%
IDEA	6,54,86,10,975	-1.9%	10.61	4.0%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PRESTIGE	39,71,250	-4.3%	1650.1	-0.8%
BPCL	2,70,31,825	-3.7%	359.2	-0.1%
LUPIN	88,39,575	-3.5%	2087.7	-0.3%
PAYTM	1,93,14,000	-3.1%	1344.1	-1.8%
POLICYBZR	76,25,100	-2.9%	1845.9	-1.7%

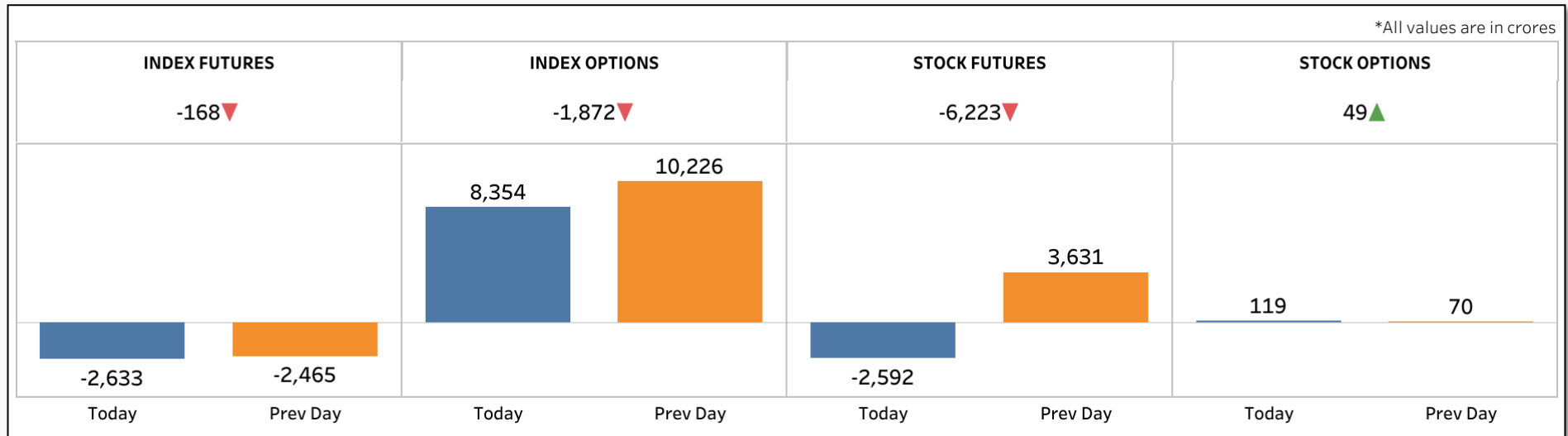
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

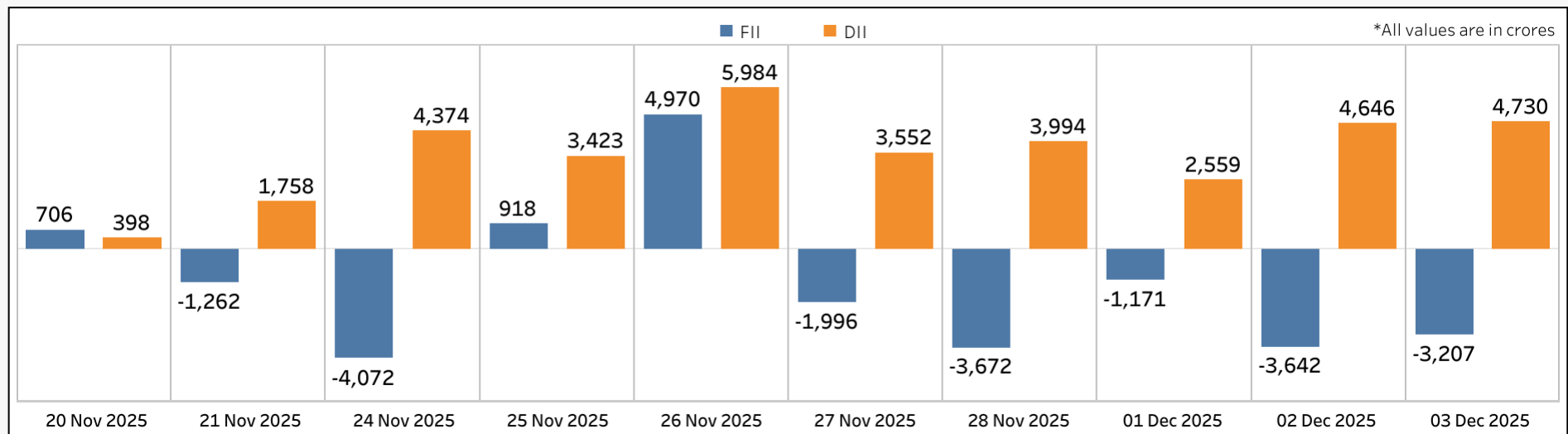
▲ and ▼ indicate positive and negative absolute changes, respectively



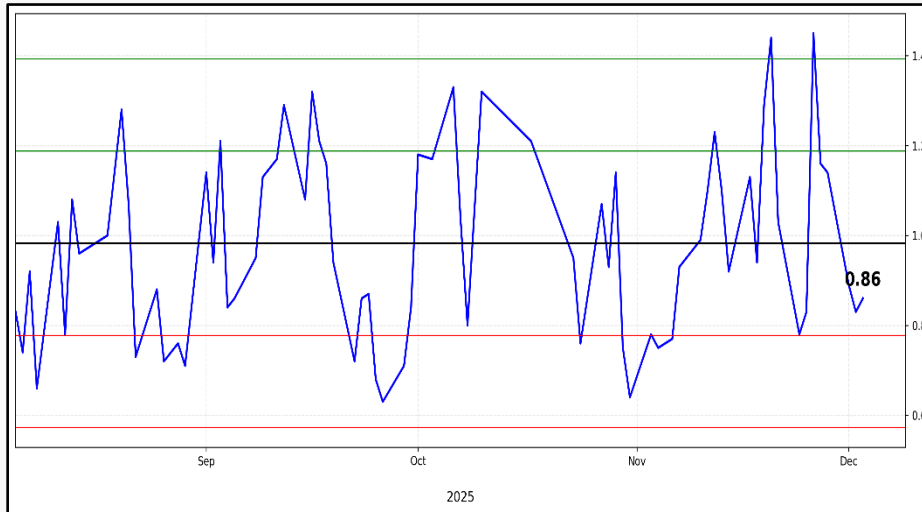
## Daily Net Open Interest Change



## DII and FII Daily Cash Market Flows



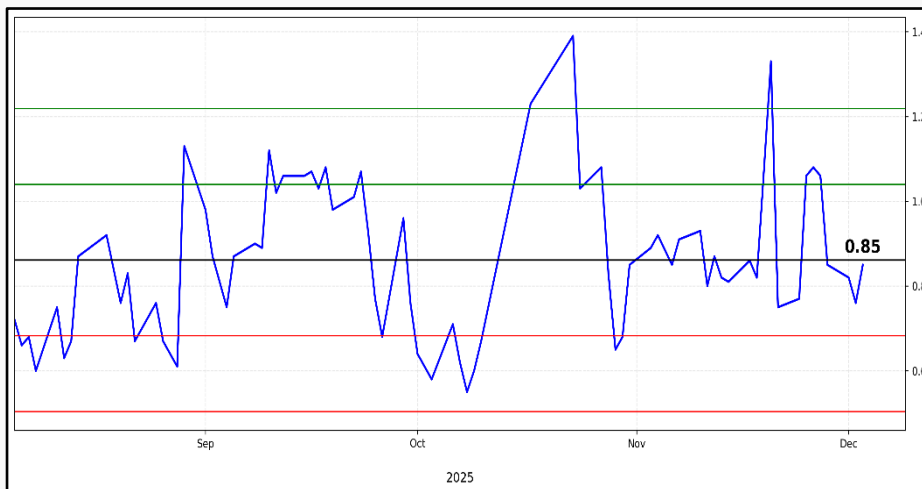
## Nifty



## Bank Nifty



## Fin Nifty

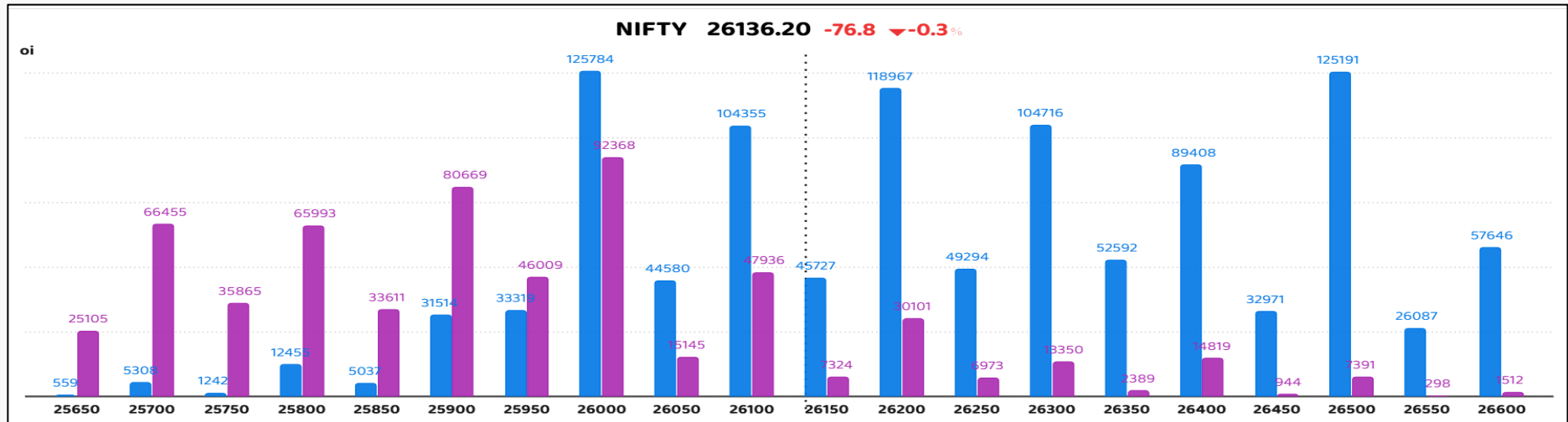


## Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 58,500 Put saw the most amount of open interest.

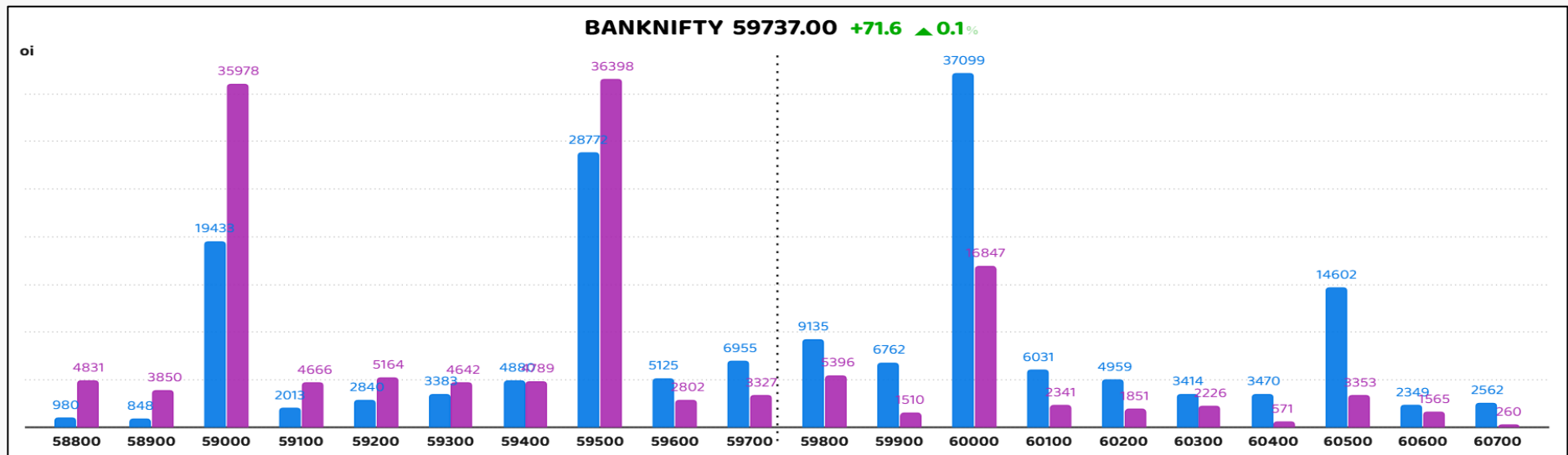
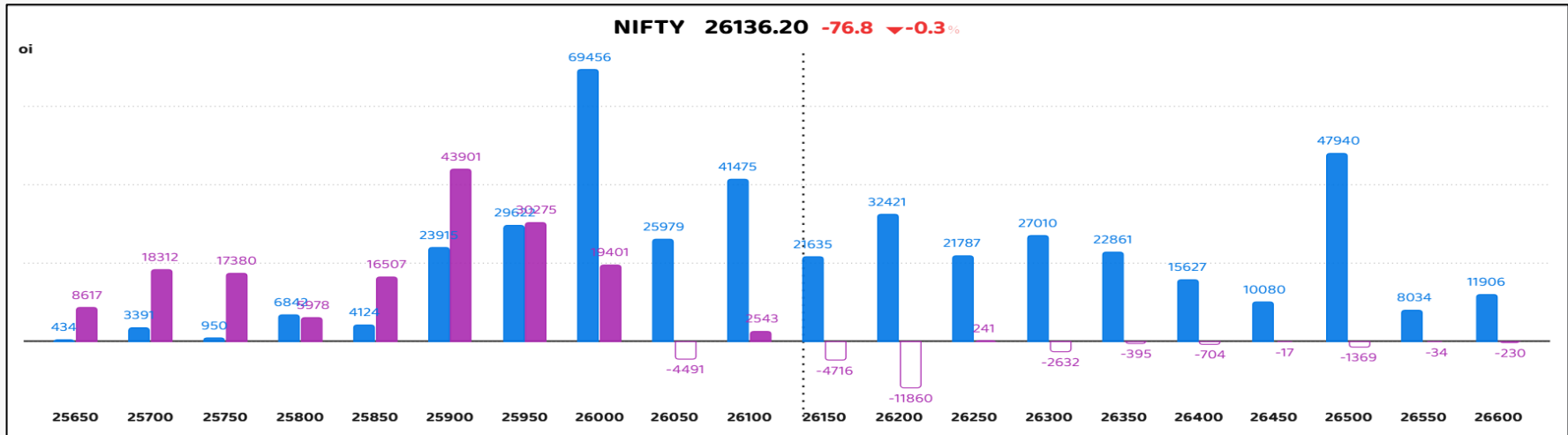


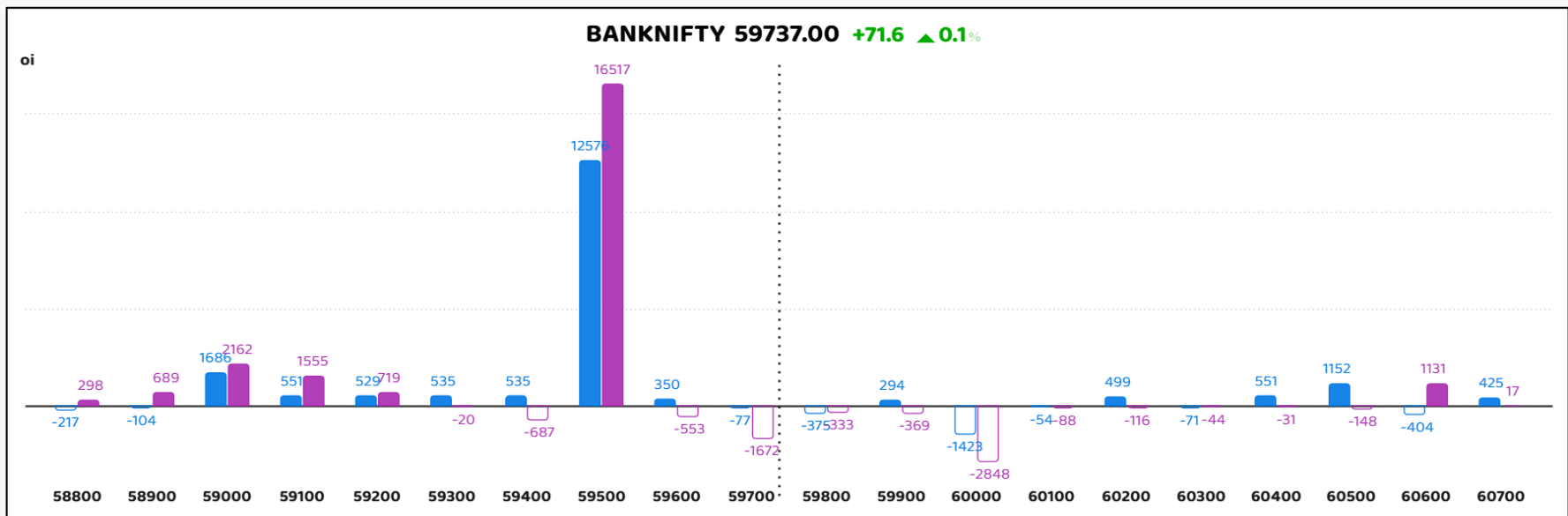
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## 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 25,900 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,500 Call & the 58,500 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HDFC BANK LTD	1,000.5	1.1	16.8	28.0	1.5	57.8
CANARA BANK	146.1	-3.9	25.6	44.7	6.6	49.7
BOSCH LTD	36,580.0	-0.2	19.0	36.2	2.1	49.6
ICICI LOMBARD GE	1,972.4	-0.7	20.5	38.2	3.2	49.5
LTIMINDTREE LTD	6,159.0	-0.1	24.6	43.3	6.8	48.8

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BHARTI AIRTEL	2,086.0	-0.9	10.9	65.2	10.9	0.0
HINDUSTAN UNILEV	2,448.0	-1.2	4.9	25.8	4.9	0.0
KOTAK MAHINDRA	2,146.1	0.2	1.1	32.4	1.1	0.0
BAJAJ FINSERV LT	2,046.0	-1.0	13.0	33.8	13.0	0.0
TVS MOTOR CO LTD	3,631.8	-1.1	16.2	42.0	16.2	0.0



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	311.7	-2.0	38.9	50.3	21.3	59.3
VODAFONE IDEA LT	10.6	4.2	57.3	212.9	10.0	47.8
JSW STEEL LTD	1,143.6	-1.6	24.9	43.7	20.1	41.3
HDFC BANK LTD	1,000.5	1.1	16.8	28.0	1.5	37.7
HINDUSTAN ZINC	504.4	1.8	28.5	54.2	21.8	33.1

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHARTI AIRTEL	2,086.0	-0.9	10.9	65.2	10.9	0.0
HINDUSTAN UNILEV	2,448.0	-1.2	4.9	25.8	4.9	0.0
KOTAK MAHINDRA	2,146.1	0.2	1.1	32.4	1.1	0.0
BAJAJ FINSERV LT	2,046.0	-1.0	13.0	33.8	13.0	0.0
TVS MOTOR CO LTD	3,631.8	-1.1	16.2	42.0	16.2	0.0

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
KPITTECH	1,258.7	0.4	8,891	1,457	6.1
DRREDDY	1,280.7	0.4	33,659	6,423	5.2
TATAELXSI	5,174.5	0.9	25,243	4,856	5.2
RVNL	311.6	-2.0	7,803	1,545	5.1
PAGEIND	37,240.0	-1.0	7,575	1,757	4.3

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SYNGENE	636.2	-0.2	1,017	1,022	1.0
POLYCAB	7,227.0	-1.6	5,666	5,428	1.0
MARUTI	16,082.0	-1.0	38,555	34,968	0.9
ADANIENSOL	969.5	-0.8	4,453	3,994	0.9
BSE	2,751.1	-3.2	35,936	31,076	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INDIANB	812.8	-5.4	9,569	9,569	100.0
JSWSTEEL	1,143.6	-1.6	23,659	23,659	100.0
KAYNES	5,307.0	-1.9	34,517	39,309	87.8
HINDUNILVR	2,448.0	-1.2	36,198	45,551	79.5
LODHA	1,103.9	-1.4	7,976	10,381	76.8

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
KAYNES	5,307.0	-1.9	13,917	13,917	100.0
TMPV	356.8	-1.4	37,421	41,434	90.3
INDIANB	812.8	-5.4	4,623	5,250	88.1
INOXWIND	130.1	-2.4	5,547	6,446	86.1
JSWENERGY	470.2	-2.9	8,497	10,025	84.8

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
HINDUNILVR	2,448.0	-1.2	2,07,420	2,73,520	75.8
INDIANB	812.8	-5.4	28,228	45,907	61.5
KFINTECH	1,071.4	-1.1	21,404	37,784	56.6
IDEA	10.6	4.1	46,515	90,380	51.5
ANGELONE	2,670.2	-5.1	73,650	1,45,630	50.6

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
INDIANB	812.8	-5.4	20,921	20,921	100.0
HINDUNILVR	2,448.0	-1.2	1,28,581	2,01,361	63.9
JSWSTEEL	1,143.6	-1.6	42,710	87,434	48.8
KFINTECH	1,071.4	-1.1	10,452	24,816	42.1
UNIONBANK	151.4	-2.8	8,483	22,700	37.4

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ANGELONE	2,670.2	-5.1	15,361	8,704	1.8
INDIANB	812.8	-5.4	9,569	5,512	1.7
JSWSTEEL	1,143.6	-1.6	23,659	14,100	1.7
HDFCLIFE	752.0	-0.9	14,282	9,294	1.5
GAIL	170.3	-2.7	20,001	13,200	1.5

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
JSWSTEEL	1,143.6	-1.6	12,442	7,537	1.7
GAIL	170.3	-2.7	13,755	8,793	1.6
KAYNES	5,307.0	-1.9	13,917	9,733	1.4
ITC	400.5	-0.1	26,902	19,683	1.4
JSWENERGY	470.2	-2.9	8,497	6,474	1.3

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
HINDUNILVR	2,448.0	-1.2	2,07,420	42,946	4.8
JSWSTEEL	1,143.6	-1.6	69,305	15,256	4.5
INDIANB	812.8	-5.4	28,228	6,541	4.3
ANGELONE	2,670.2	-5.1	73,650	24,547	3.0
DRREDDY	1,280.7	0.4	33,659	12,871	2.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
HINDUNILVR	2,448.0	-1.2	1,28,581	16,988	7.6
INDIANB	812.8	-5.4	20,921	3,299	6.3
JSWSTEEL	1,143.6	-1.6	42,710	7,001	6.1
ANGELONE	2,670.2	-5.1	52,180	13,496	3.9
KFINTECH	1,071.4	-1.1	10,452	3,034	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	2300	2508771	5.0%	2190	2300	952956	5.0%	JIOFIN	310	8706750	3.0%	301	300	7026500	-0.3%
ADANIPORTS	1600	1959375	6.8%	1498	1500	781375	0.2%	JSWSTEEL	1200	4617000	4.9%	1144	1100	1528875	-3.8%
APOLLOHOSP	7500	342125	4.4%	7184	7500	116625	4.4%	KOTAKBANK	2200	986800	2.5%	2146	2100	858800	-2.1%
ASIANPAINT	3000	836750	1.6%	2953	2900	556500	-1.8%	LT	4100	618275	2.8%	3988	4000	354900	0.3%
AXISBANK	1300	2652500	2.3%	1271	1280	1002500	0.7%	M&M	3800	1129400	4.1%	3649	3700	502400	1.4%
BAJAJ-AUTO	9500	256125	5.5%	9001	9000	157875	0.0%	MARUTI	16500	231350	2.6%	16082	15000	220200	-6.7%
BAJAJFINSV	2100	719250	2.6%	2046	1880	362750	-8.1%	MAXHEALTH	1200	842100	10.5%	1086	1160	468300	6.8%
BAJFINANCE	1100	2218500	7.7%	1021	1000	1785750	-2.1%	NESTLEIND	1320	2142500	6.3%	1242	1180	336500	-5.0%
BEL	420	8947575	4.0%	404	400	4369050	-1.0%	NTPC	330	4405500	2.2%	323	300	2317500	-7.1%
BHARTIARTL	2200	2507050	5.5%	2086	2100	1427850	0.7%	ONGC	250	10122750	4.2%	240	250	2198250	4.2%
CIPLA	1660	942375	10.1%	1508	1410	562875	-6.5%	POWERGRID	280	4856400	4.3%	268	250	2186900	-6.9%
COALINDIA	380	2835000	1.3%	375	440	1590300	17.3%	RELIANCE	1600	8254500	4.0%	1539	1500	2495000	-2.5%
DRREDDY	1300	1835625	1.5%	1281	1140	395625	-11.0%	SBILIFE	2200	270000	11.5%	1973	1900	383625	-3.7%
EICHERMOT	7300	359100	3.1%	7082	6300	241325	-11.0%	SBIN	1000	9063750	5.1%	951	980	3880500	3.0%
ETERNAL	310	12515425	4.1%	298	300	4874250	0.8%	SHRIRAMFIN	880	2621025	6.3%	828	800	1706925	-3.4%
GRASIM	2800	664000	2.9%	2720	2700	573500	-0.7%	SUNPHARMA	1840	1052100	1.8%	1807	1700	229600	-5.9%
HCLTECH	1800	1087100	9.7%	1640	1440	515550	-12.2%	TATACONSUM	1200	1005950	5.3%	1140	1070	372350	-6.1%
HDFCBANK	1000	4114000	0.0%	1001	1000	3100350	0.0%	TMPV	175	27467000	4.9%	167	170	12919500	1.9%
HDFCLIFE	800	4779500	6.4%	752	700	1508100	-6.9%	TCS	3200	1523900	0.6%	3180	3200	755475	0.6%
HINDALCO	800	2395400	-2.0%	816	800	1737400	-2.0%	TECHM	1600	691800	3.8%	1542	1500	523800	-2.7%
HINDUNILVR	2500	2178300	2.1%	2448	2400	820800	-2.0%	TITAN	3900	386925	2.2%	3818	3600	313250	-5.7%
ICICIBANK	1400	6602400	0.6%	1392	1400	3439800	0.6%	TMPV	400	11340800	12.1%	357	360	5078400	0.9%
INDIGO	6000	493050	7.2%	5596	5500	207450	-1.7%	TRENT	4400	634100	5.1%	4188	4300	325700	2.7%
INFY	1600	7408400	1.3%	1579	1500	1632400	-5.0%	ULTRACEMCO	12000	133050	3.5%	11591	10800	133350	-6.8%
ITC	410	9376000	2.4%	401	390	9163200	-2.6%	WIPRO	260	7299000	2.1%	255	250	3663000	-1.8%

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

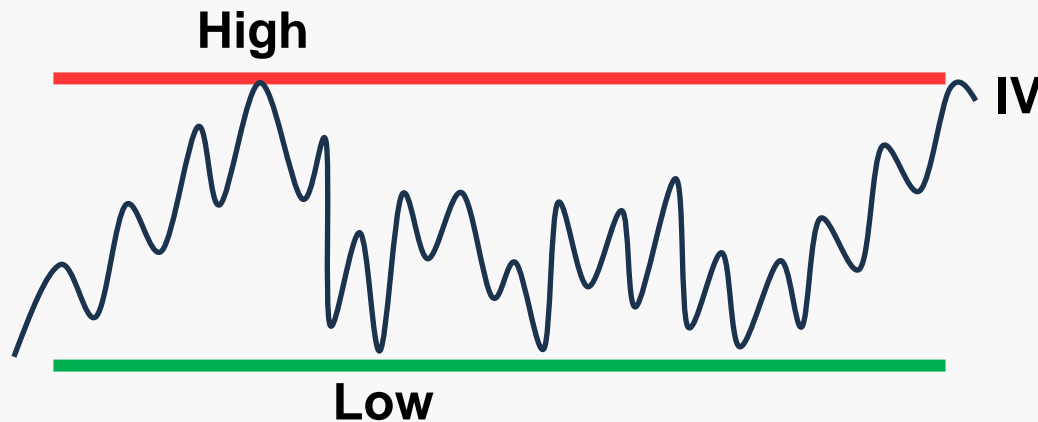
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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*

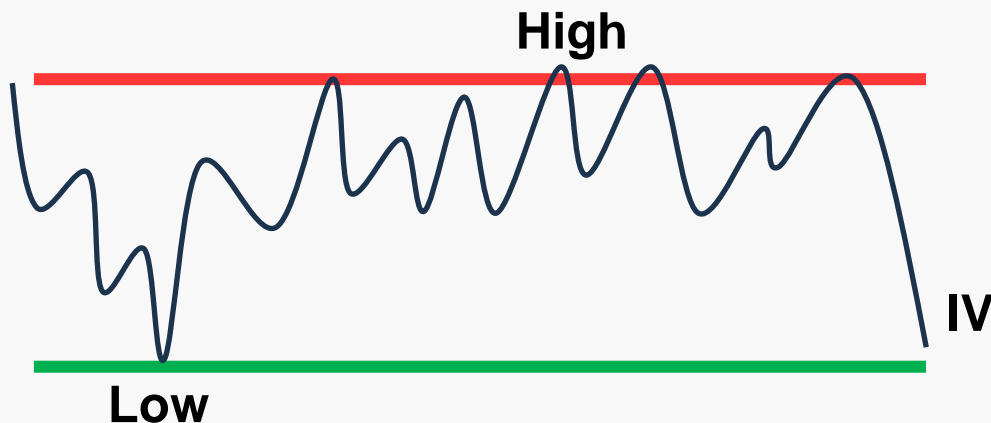


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, 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](http://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

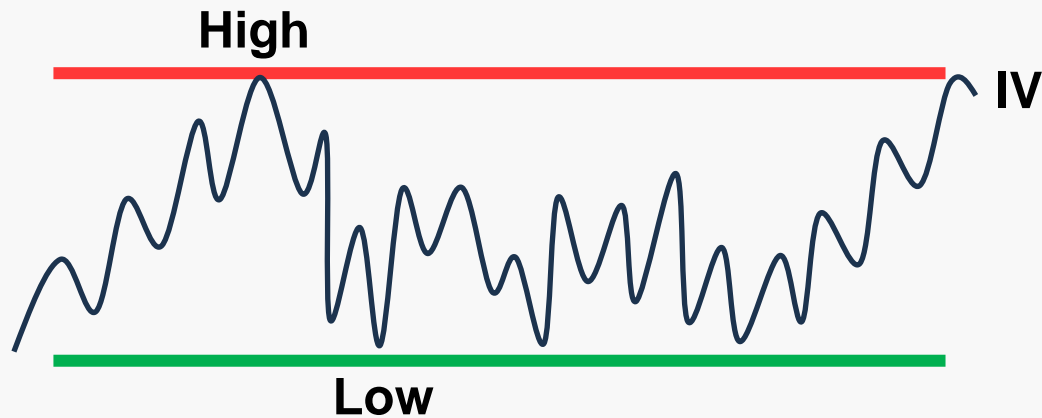


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

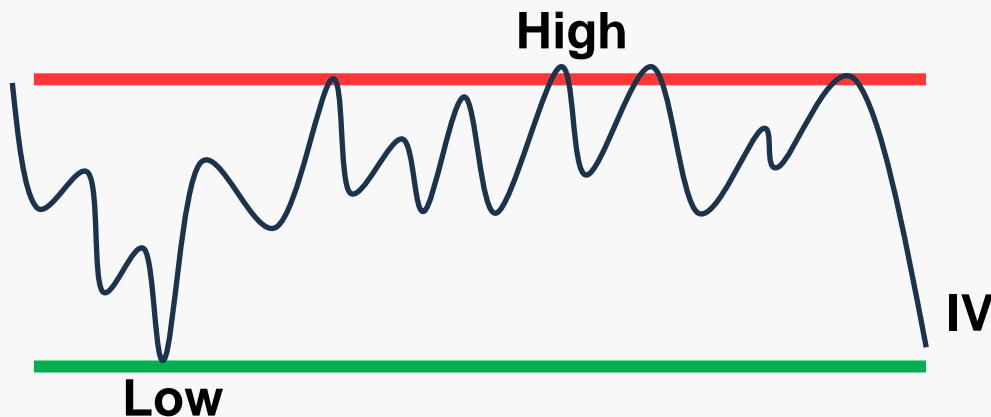


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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.

## Disclaimer & Disclosures

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