



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	26,060	0.4%▼
Open Interest (OI)	1,66,50,460	0.8%▲
Change in OI (abs)	1,66,50,460	1,35,185▲
Premium / Discount (Abs)	18	13▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	59,253	0.3%▼
Open interest (OI)	17,96,100	5.8%▼
Change in OI (abs)	17,96,100	1,04,155▼
Premium / Discount (Abs)	69	15▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Volatility Insights

	Value	Change
India VIX Index	9.15	0.04▼
Nifty ATM IV (%)	5.86	1.01▼
Bank Nifty ATM IV (%)	6.52	1.33▼
PCR (Nifty)	0.76	0.22▼
PCR (Bank Nifty)	0.74	0.03▼

The FII Long Ratio in Index Futures **drop** to 11.4 %, **down** from 12.4 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NBCC	9,32,36,000	10.5%	122.3	5.1%
FEDERALBNK	7,29,70,000	8.8%	262.4	0.0%
TITAN	1,01,58,225	7.6%	3991.8	2.0%
HINDUNILVR	1,23,89,100	6.2%	2286.6	0.1%
IRFC	5,50,16,250	5.2%	133.78	9.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COFORGE	1,52,00,250	14.7%	1676.8	-3.5%
SBICARD	1,93,95,200	14.2%	867.85	-0.3%
IEX	6,40,80,000	11.2%	135.36	-2.6%
BDL	55,55,450	10.4%	1482.6	-0.2%
TATATECH	1,32,97,600	10.4%	656.4	-0.2%

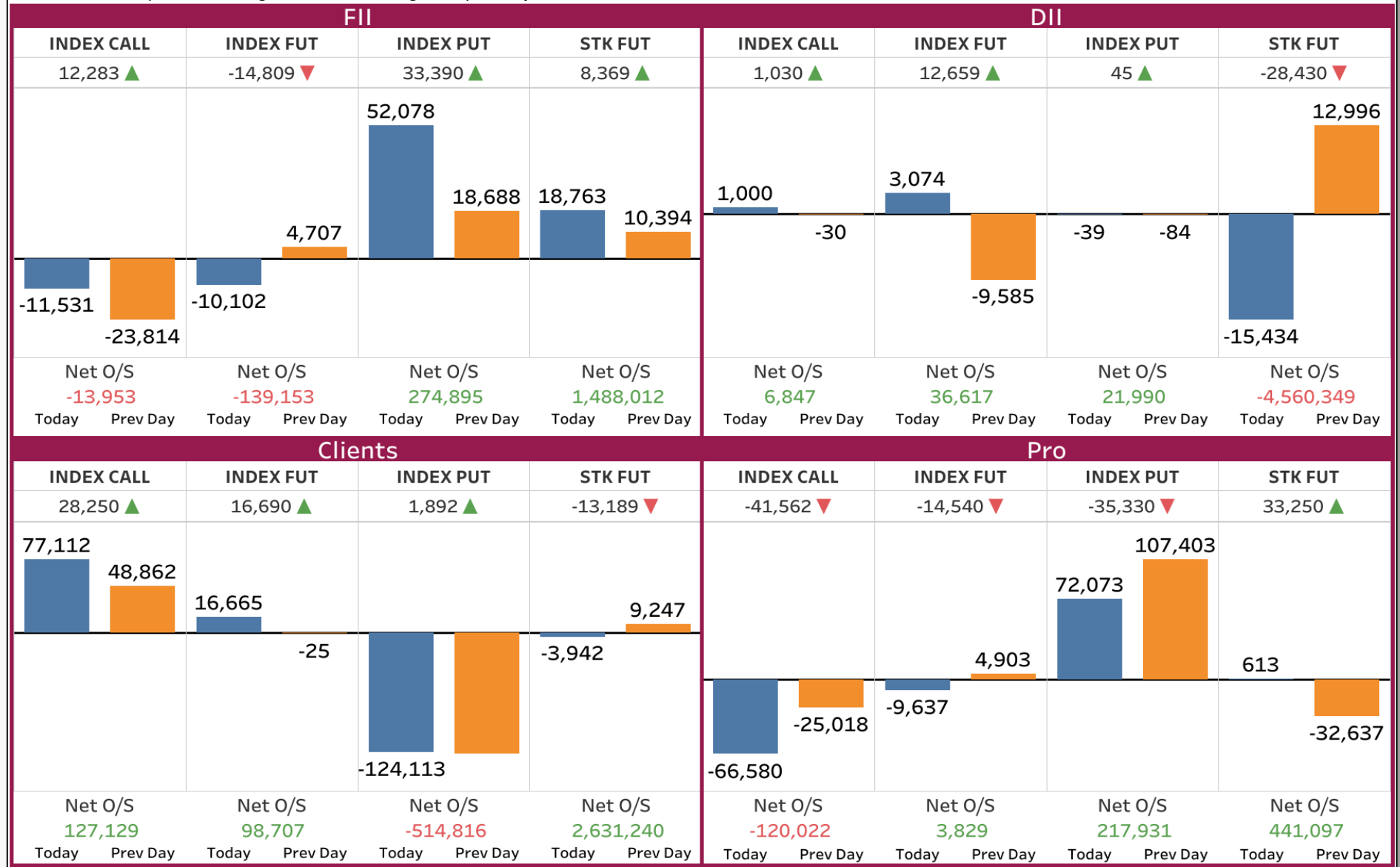
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TITAGARH	30,75,450	-21.2%	900.7	5.2%
NAUKRI	81,95,250	-5.7%	1366.3	0.0%
SHREECEM	3,28,600	-5.3%	26385	1.0%
OBEROIRLTY	43,95,650	-4.3%	1680.5	0.7%
PIIND	24,75,200	-3.0%	3237.8	0.3%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CYIENT	17,78,625	-22.1%	1119	-0.2%
NCC	1,49,60,700	-12.8%	158.04	-2.2%
HFCL	7,30,33,350	-11.6%	61.42	-4.3%
KEI	13,01,475	-11.5%	4377.6	-1.1%
360ONE	24,72,000	-10.1%	1182.2	-1.3%

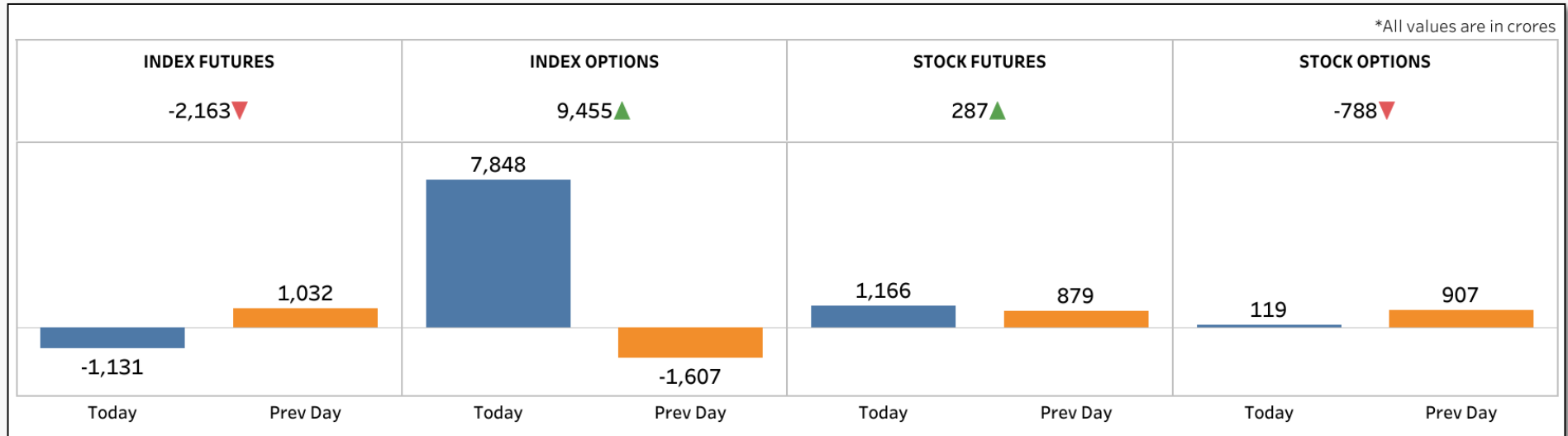
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

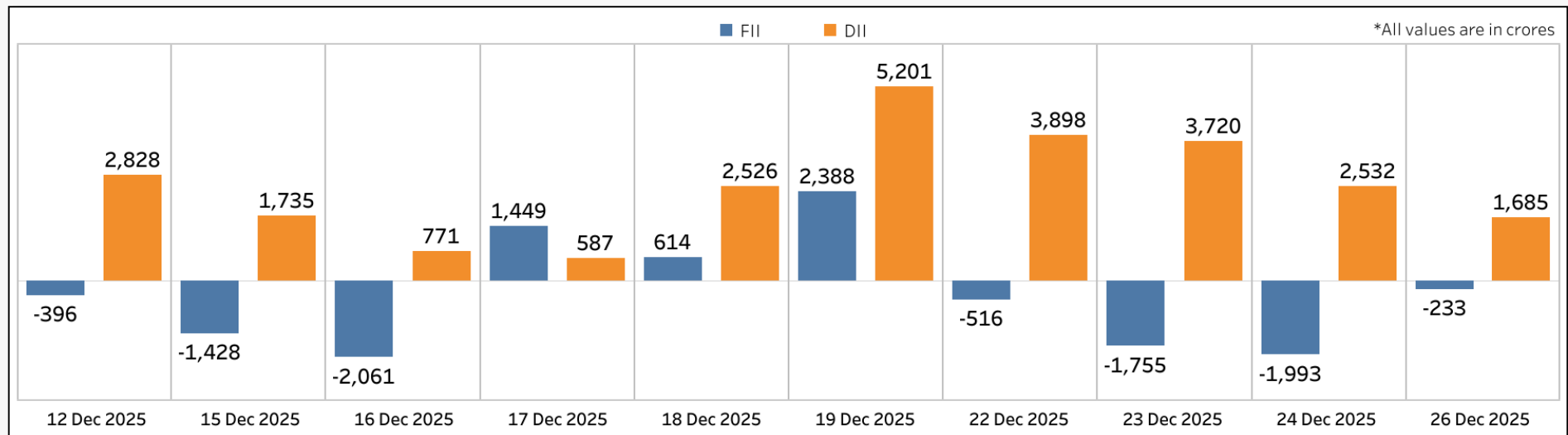
▲ and ▼ indicate positive and negative absolute changes, respectively



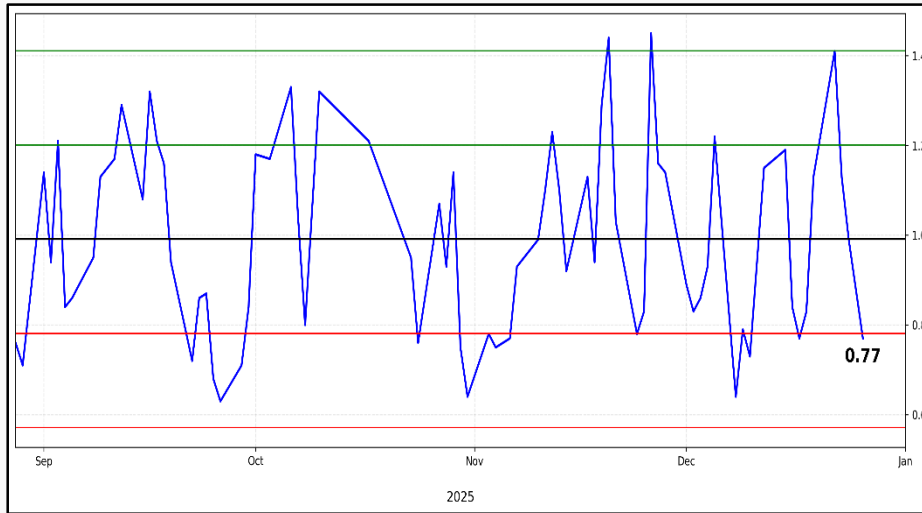
## Daily Net Open Interest Change



## DII and FII Daily Cash Market Flows



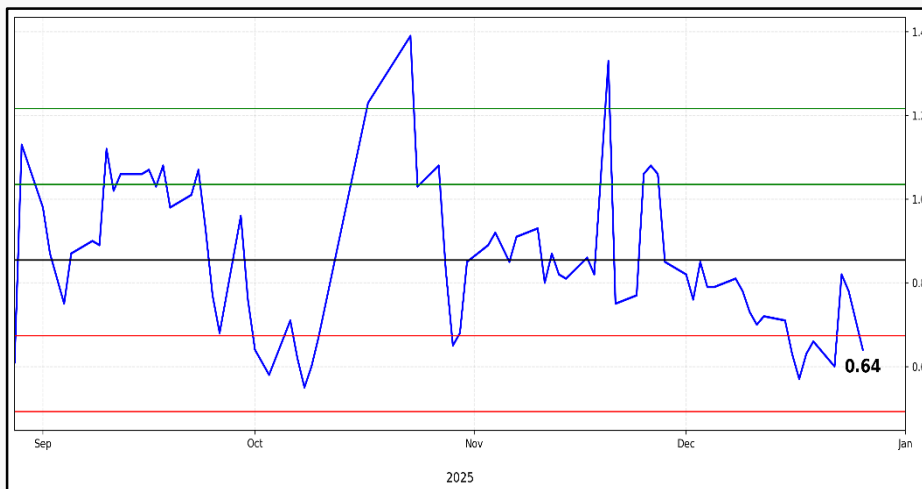
## Nifty



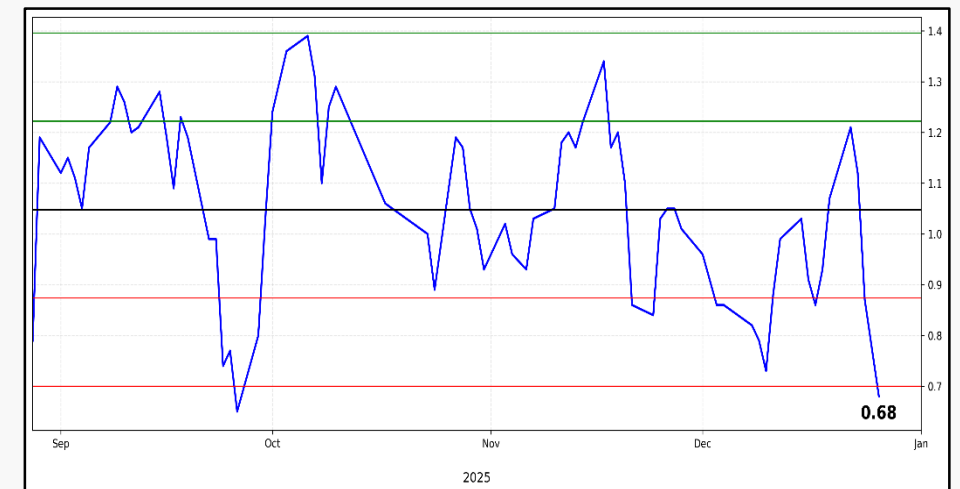
## Bank Nifty



## Fin Nifty

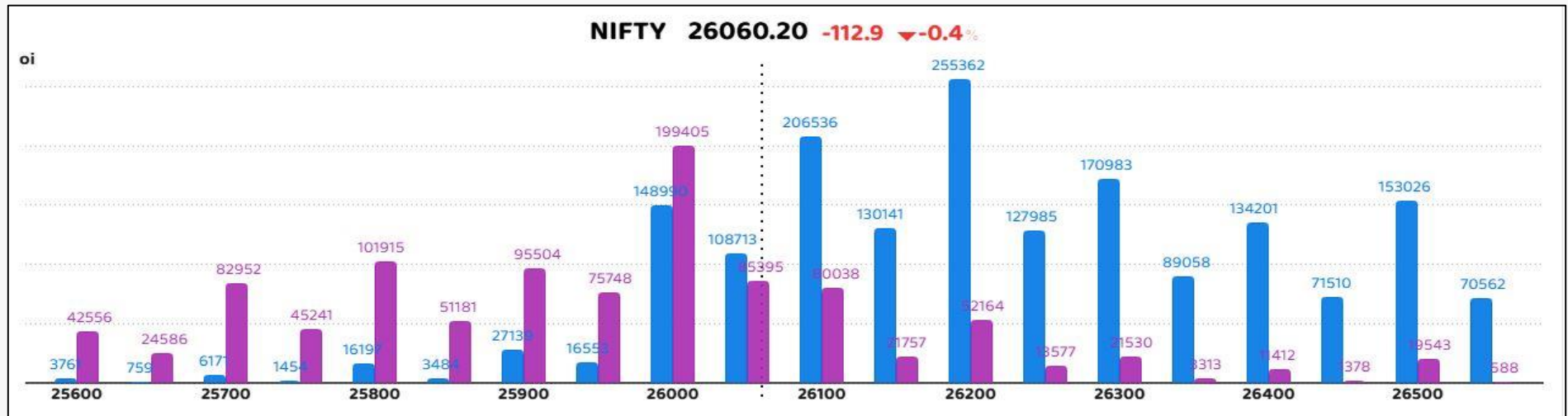


## Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,200 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 59,500 Call and the 59,000 Put saw the most amount of open interest.

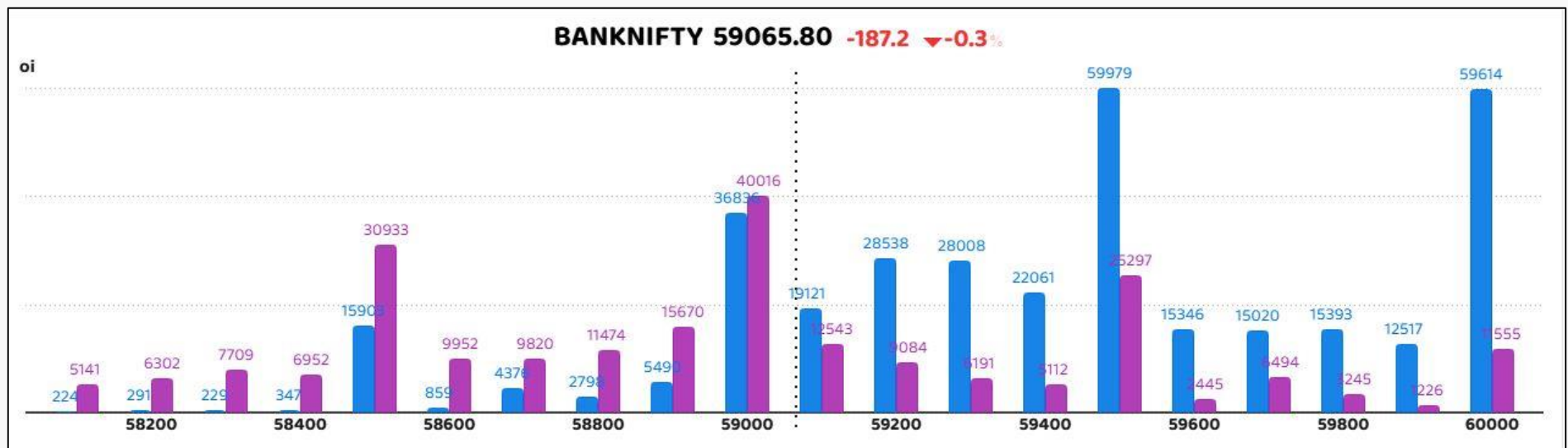
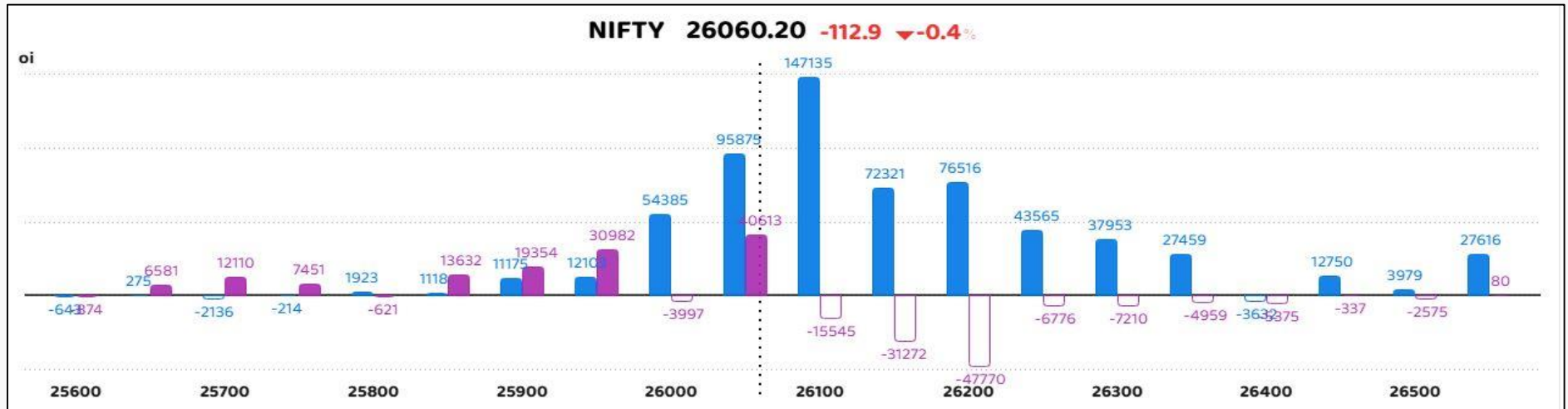


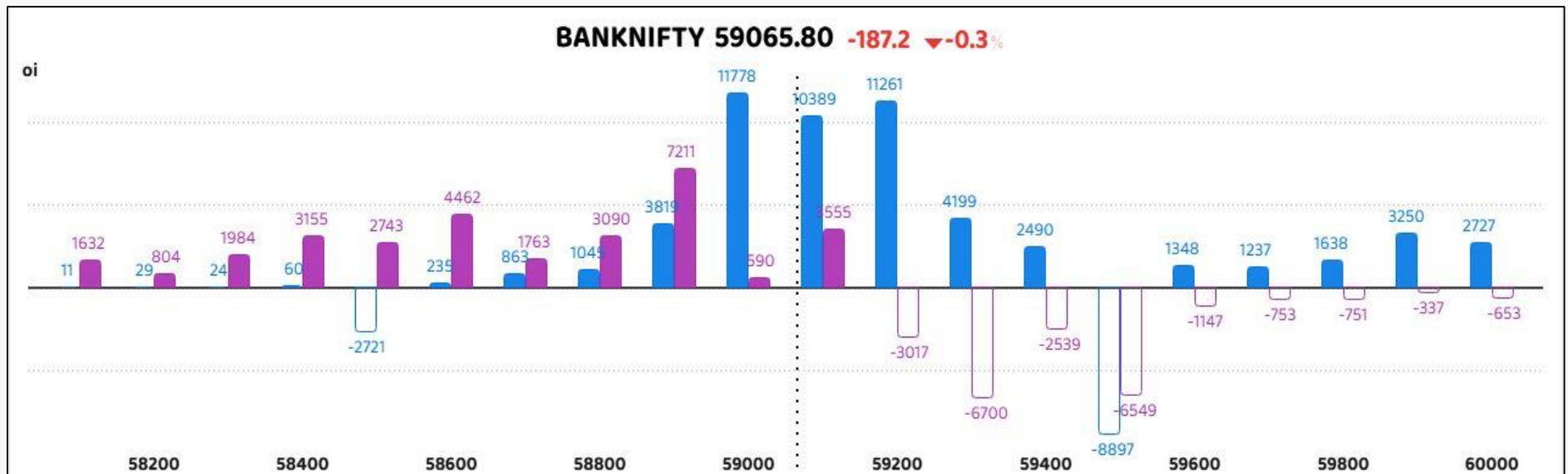
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,100 Call and the 26,200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,000 Call & the 58,900 Put



## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	12,328.0	-2.4	40.8	53.1	9.2	71.9
HINDUSTAN UNILEV	2,285.4	0.1	17.0	25.8	0.8	64.7
BHARAT HEAVY ELE	281.5	1.2	32.6	54.7	5.2	55.3
BAJAJ FINANCE LT	1,000.0	-1.2	24.3	34.0	12.6	54.7
LTIMINDTREE LTD	6,035.5	-2.1	26.6	43.3	6.8	54.3

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BHARAT FORGE CO	1,443.8	-0.5	22.2	47.8	22.2	0.0
ADANI PORTS AND	1,487.1	-0.5	19.9	99.7	19.0	1.1
SRF LTD	3,101.6	0.1	21.3	40.1	21.1	1.2
GAIL INDIA LTD	171.0	0.0	20.8	91.4	19.4	1.9
BIOCON LTD	395.5	-0.7	24.8	55.0	23.9	2.8



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HFCL LTD	61.5	-4.3	58.4	89.4	32.2	98.5
COFORGE LTD	1,673.3	-3.7	40.3	60.2	18.1	91.0
HINDUSTAN ZINC	636.9	1.9	38.7	54.2	21.8	89.5
KAYNES TECHNOLOG	4,060.5	-1.4	44.0	62.9	30.3	88.4
VODAFONE IDEA LT	11.9	-0.7	72.2	212.9	10.0	81.9

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHARAT FORGE CO	1,443.8	-0.5	22.2	47.8	22.2	0.0
SRF LTD	3,101.6	0.1	21.3	40.1	21.1	0.9
BANK OF BARODA	288.2	-0.8	19.9	41.2	19.3	1.0
TATA TECHNOLOGIE	654.6	-0.5	20.0	54.4	18.7	1.3
MAHINDRA & MAHIN	3,623.1	-0.4	20.0	43.5	11.0	1.5

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
IRCTC	705.5	3.8	1,92,767	36,324	5.3
IREDA	141.0	2.1	51,401	10,451	4.9
CONCOR	520.3	2.3	45,855	9,533	4.8
TITAGARH	897.8	5.0	1,09,429	23,510	4.7
INDIANB	778.4	0.2	6,585	1,615	4.1

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
POLYCAB	7,556.5	-1.0	14,282	15,682	1.1
ABB	5,183.0	-0.6	8,125	8,862	1.1
PAGEIND	36,470.0	-0.4	8,554	9,181	1.1
POLICYBZR	1,909.4	-0.4	7,425	7,729	1.0
CHOLAFIN	1,698.0	0.0	32,054	33,035	1.0

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDZINC	636.8	1.9	49,897	47,693	100.0
PPLPHARMA	174.2	-1.7	7,930	7,783	100.0
RVNL	388.0	12.2	26,553	15,990	100.0
VEDL	601.0	0.5	55,759	52,524	100.0
NUVAMA	1,493.5	-1.9	7,659	7,855	97.5

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
BDL	1,477.9	-0.2	12,345	12,282	100.0
HINDZINC	636.8	1.9	33,668	33,663	100.0
IRFC	133.6	10.0	15,095	12,077	100.0
NBCC	122.1	5.1	5,092	4,309	100.0
RVNL	388.0	12.2	21,330	10,806	100.0

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
IRCTC	705.5	3.8	1,92,767	1,40,591	100.0
IRFC	133.6	10.0	2,13,846	1,10,643	100.0
MAZDOCK	2,541.4	0.0	2,66,696	2,14,158	100.0
NBCC	122.1	5.1	45,707	41,569	100.0
RVNL	388.0	12.2	2,82,230	1,24,401	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
IRFC	133.6	10.0	73,042	35,081	100.0
MAZDOCK	2,541.4	0.0	1,31,149	69,614	100.0
RVNL	388.0	12.2	1,34,027	37,762	100.0
PRESTIGE	1,609.6	-0.5	20,123	20,962	96.0
NBCC	122.1	5.1	13,525	15,569	86.9

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
COFORGE	1,673.3	-3.7	44,764	19,263	2.3
COALINDIA	402.2	0.0	34,190	15,004	2.3
CHOLAFIN	1,698.0	0.0	18,585	8,705	2.1
IRCTC	705.5	3.8	22,556	11,020	2.0
RVNL	388.0	12.2	26,553	13,328	2.0

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
IRFC	133.6	10.0	15,095	4,871	3.1
RVNL	388.0	12.2	21,330	7,223	3.0
CHOLAFIN	1,698.0	0.0	24,056	8,799	2.7
COFORGE	1,673.3	-3.7	22,333	9,725	2.3
MANAPPURAM	313.4	-0.4	7,694	3,706	2.1

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
IRCTC	705.5	3.8	1,92,767	8,838	21.8
IRFC	133.6	10.0	2,13,846	13,325	16.0
RVNL	388.0	12.2	2,82,230	21,224	13.3
TITAN	3,992.0	2.1	2,63,835	25,765	10.2
TITAGARH	897.8	5.0	1,09,429	11,485	9.5

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
RVNL	388.0	12.2	1,34,027	6,486	20.7
IRFC	133.6	10.0	73,042	4,812	15.2
IRCTC	705.5	3.8	36,324	2,728	13.3
MAZDOCK	2,541.4	0.0	1,31,149	11,393	11.5
TITAGARH	897.8	5.0	23,510	3,044	7.7

## 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	2400	2025495	7.6%	2230	2300	675165	3.1%	JIOFIN	305	12588950	2.7%	297	300	3959750	1.0%
ADANIPTS	1520	1773650	2.2%	1487	1500	489725	0.9%	JSWSTEEL	1200	2993625	9.6%	1094	1000	969975	-8.6%
APOLLOHOSP	7500	285375	4.8%	7156	7000	113000	-2.2%	KOTAKBANK	2200	1390000	1.7%	2164	2000	890000	-7.6%
ASIANPAINT	3000	836250	9.2%	2747	2600	441750	-5.3%	LT	4100	775425	1.3%	4047	4000	287175	-1.2%
AXISBANK	1290	3581250	5.0%	1228	1220	1356250	-0.7%	M&M	3800	707800	4.9%	3623	3600	299600	-0.6%
BAJAJ-AUTO	9300	242025	2.6%	9065	9000	109425	-0.7%	MARUTI	17000	155850	2.4%	16596	15000	155700	-9.6%
BAJAJFINSV	2100	948000	4.1%	2018	1880	369250	-6.8%	MAXHEALTH	1100	667275	2.4%	1074	1040	513975	-3.2%
BAJFINANCE	1050	2958750	5.0%	1000	1000	1317750	0.0%	NESTLEIND	1320	1608000	3.7%	1273	1250	216500	-1.8%
BEL	410	9142800	2.9%	398	400	2590650	0.4%	NTPC	330	6759000	1.8%	324	295	1621500	-9.0%
BHARTIARTL	2160	2588750	2.6%	2105	2100	762375	-0.3%	ONGC	250	8784000	6.6%	235	230	1512000	-1.9%
CIPLA	1660	817875	10.2%	1506	1400	505500	-7.0%	POWERGRID	280	4275000	5.5%	265	260	2321800	-2.1%
COALINDIA	410	3289950	2.0%	402	400	2273400	-0.5%	RELIANCE	1600	8232000	2.6%	1559	1500	2185500	-3.8%
DRREDDY	1300	1841875	2.4%	1269	1140	372500	-10.2%	SBILIFE	2040	876750	1.0%	2019	1840	265125	-8.9%
EICHERMOT	8000	135625	9.2%	7324	6300	235725	-14.0%	SBIN	1000	6173250	3.5%	966	950	2347500	-1.7%
ETERNAL	310	10459025	10.0%	282	285	3567175	1.2%	SHRIRAMFIN	1000	2729925	4.1%	960	900	1480875	-6.3%
GRASIM	3000	324500	6.5%	2818	2700	404500	-4.2%	SUNPHARMA	1840	1953700	7.0%	1720	1700	252700	-1.1%
HCLTECH	1720	1105650	3.6%	1661	1440	503300	-13.3%	TATACONSUM	1200	1701150	2.1%	1176	1070	350900	-9.0%
HDFCBANK	1000	4932950	0.8%	992	1000	1444300	0.8%	TMPV	370	8677600	3.1%	359	350	5578400	-2.5%
HDFCLIFE	800	2689500	6.9%	748	700	1345300	-6.5%	TATASTEEL	175	20135500	3.5%	169	170	10323500	0.5%
HINDALCO	880	1446900	0.8%	873	800	912100	-8.4%	TCS	3300	883925	0.6%	3280	3200	483175	-2.4%
HINDUNILVR	2300	768000	0.6%	2285	2300	324600	0.6%	TECHM	1600	748200	-0.8%	1612	1500	375600	-7.0%
ICICIBANK	1400	5793900	3.7%	1350	1400	2417100	3.7%	TITAN	4000	699125	0.2%	3992	3800	438550	-4.8%
INDIGO	5500	1739100	8.4%	5074	5000	887550	-1.5%	TRENT	4400	734600	2.7%	4285	4000	261000	-6.7%
INFY	1600	7625600	-3.4%	1656	1600	4666400	-3.4%	ULTRACEMCO	12000	130400	1.7%	11794	10800	86050	-8.4%
ITC	410	9500800	1.4%	404	400	3316800	-1.0%	WIPRO	285	5148000	7.0%	266	260	4623000	-2.4%

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

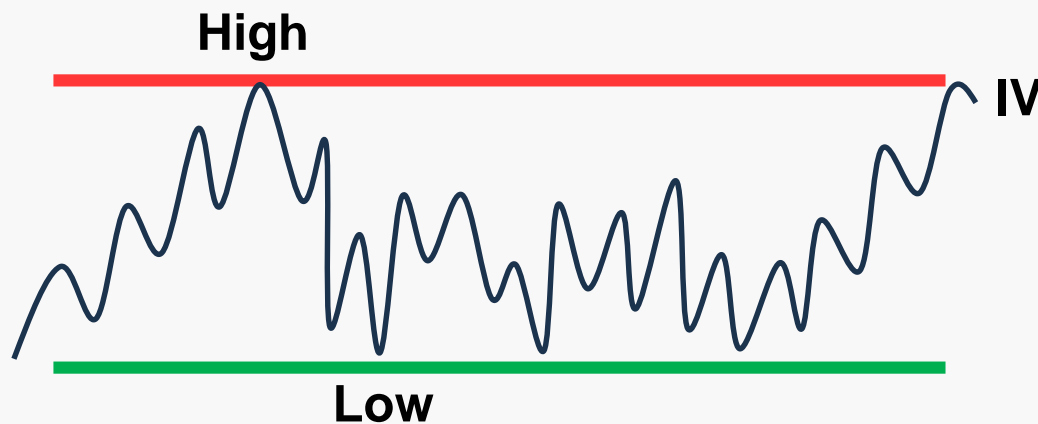


- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

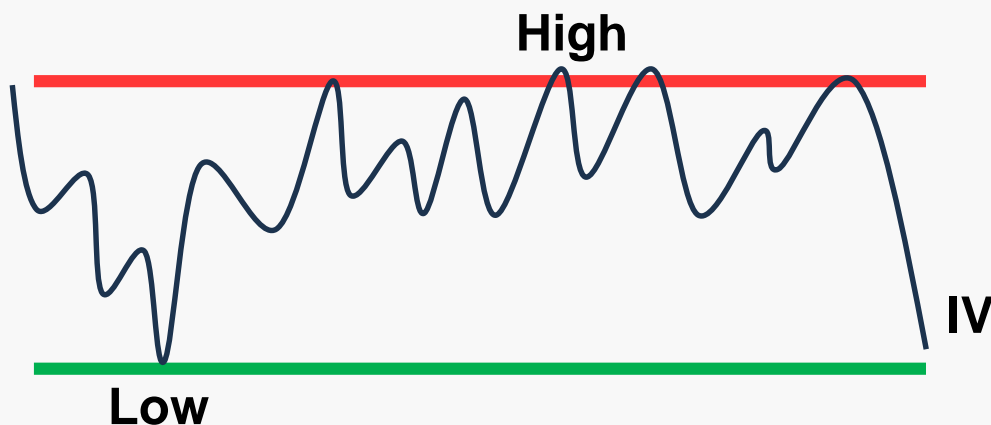
*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

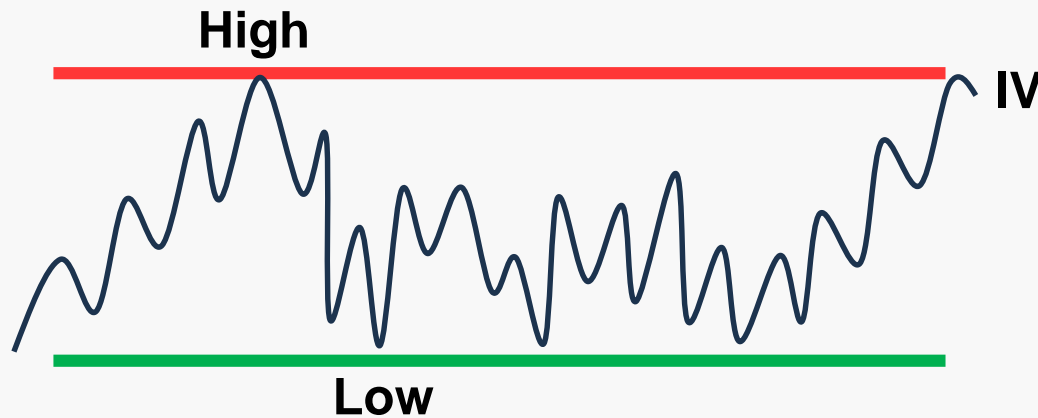


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

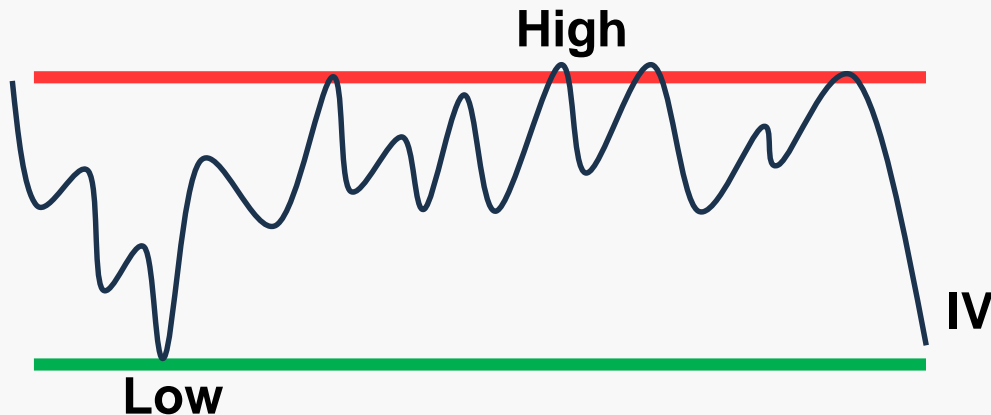


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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.

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