



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,187	0.2%▲
Open Interest (OI)	1,64,49,565	0.4%▼
Change in OI (abs)	1,64,49,565	59,065▼
Premium / Discount (Abs)	153	3▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,643	0.2%▼
Open interest (OI)	18,20,760	5.2%▲
Change in OI (abs)	18,20,760	90,405▲
Premium / Discount (Abs)	355	34▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	10.82	0.38▼
Nifty ATM IV (%)	9.59	0.49▲
Bank Nifty ATM IV (%)	10.25	0.25▼
PCR (Nifty)	1.14	0.29▲
PCR (Bank Nifty)	1.21	0.21▲

The FII Long Ratio in Index Futures **drop** to 12.5 %, **down** from 14 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LODHA	1,23,61,050	11.3%	1116.1	0.5%
SHRIRAMFIN	6,52,87,200	9.1%	833.6	0.0%
ADANIENT	2,17,50,510	3.7%	2225.5	1.1%
HDFCLIFE	2,87,07,800	3.6%	765	1.5%
UNOMINDA	47,27,800	3.0%	1279.6	0.7%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KAYNES	30,93,400	16.8%	5004	-6.3%
BIOCON	4,86,22,500	7.3%	389.8	-5.5%
INDIGO	77,66,100	6.4%	5461	-2.7%
SBIN	8,17,44,750	5.6%	954.1	-0.3%
MUTHOOTFIN	26,45,775	4.9%	3711.3	-1.6%

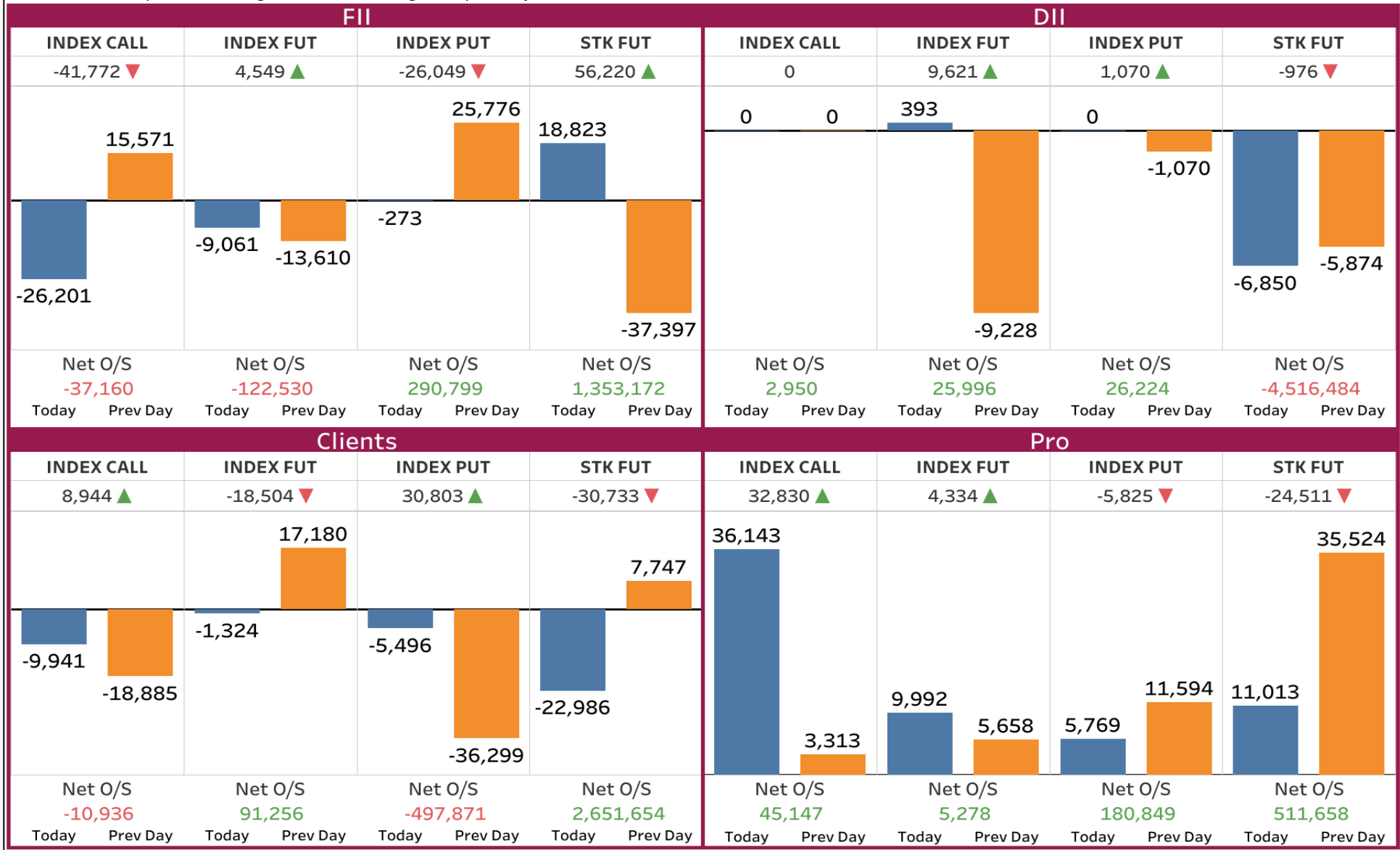
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDUNILVR	61,98,600	-22.0%	2462.8	0.5%
CAMS	17,72,100	-10.6%	3978.5	2.6%
BOSCHLTD	1,99,000	-5.8%	36970	0.7%
POLICYBZR	73,31,450	-3.9%	1860.2	0.8%
OFSS	13,62,600	-3.2%	8238	1.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HUDCO	3,29,11,500	-2.7%	223.22	-1.3%
TITAGARH	57,80,425	-1.8%	793.8	-0.3%
TORNTPOWER	27,99,400	-1.7%	1307.2	-0.2%
HINDZINC	3,64,30,275	-1.5%	498.4	-1.6%
DELHIVERY	1,63,46,850	-1.3%	403.35	-0.2%

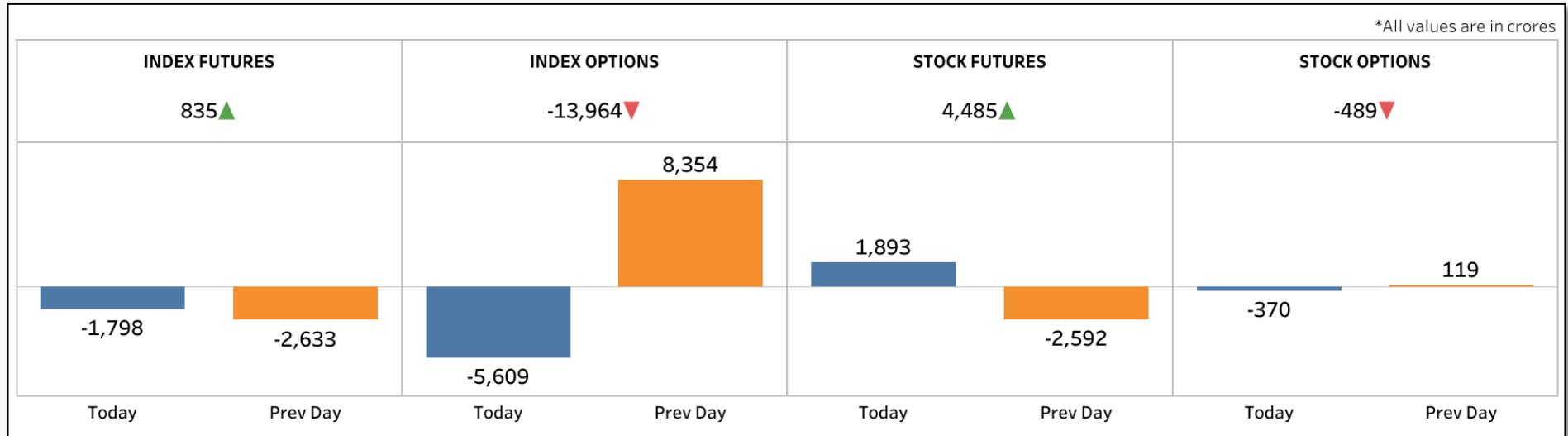
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

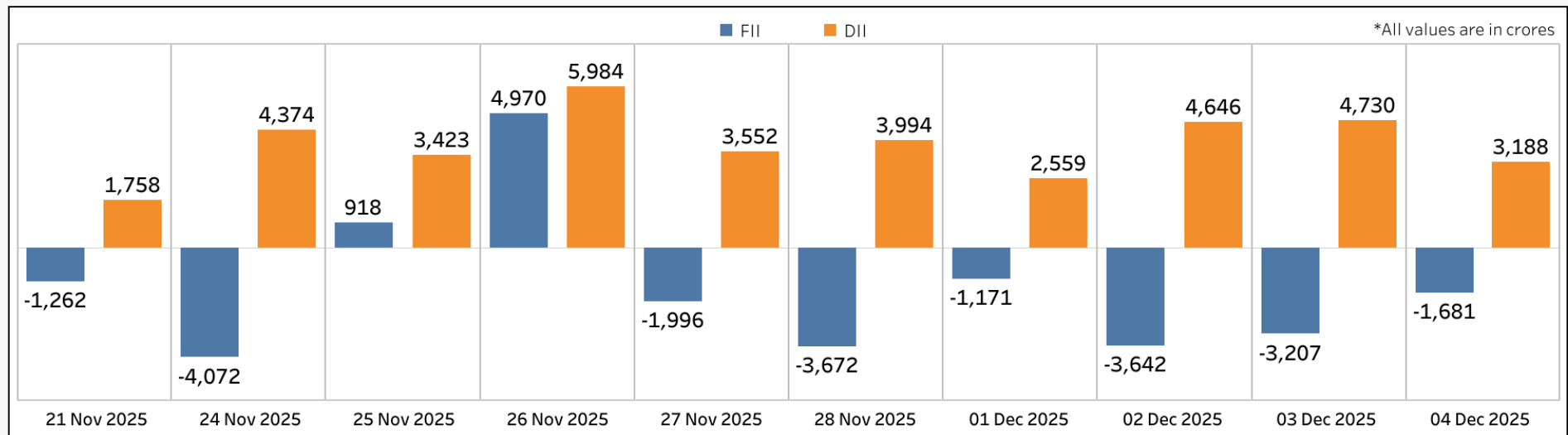
▲ and ▼ indicate positive and negative absolute changes, respectively



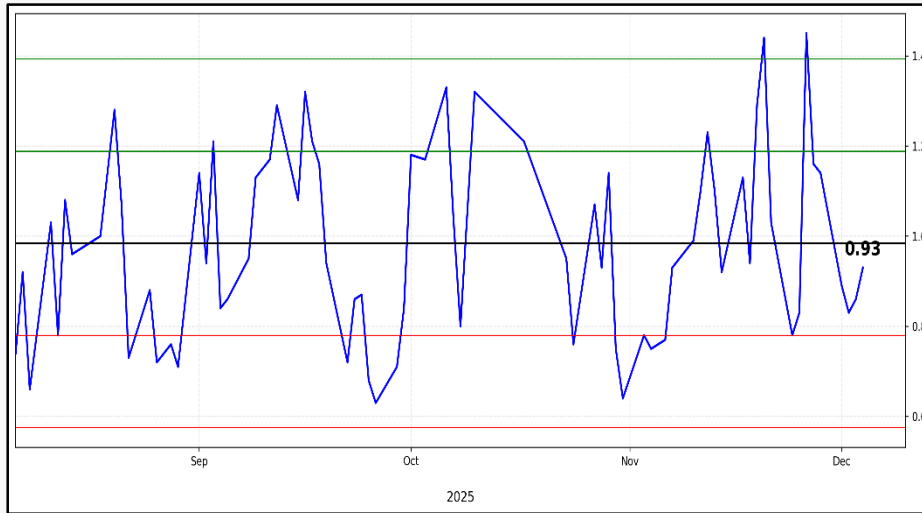
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



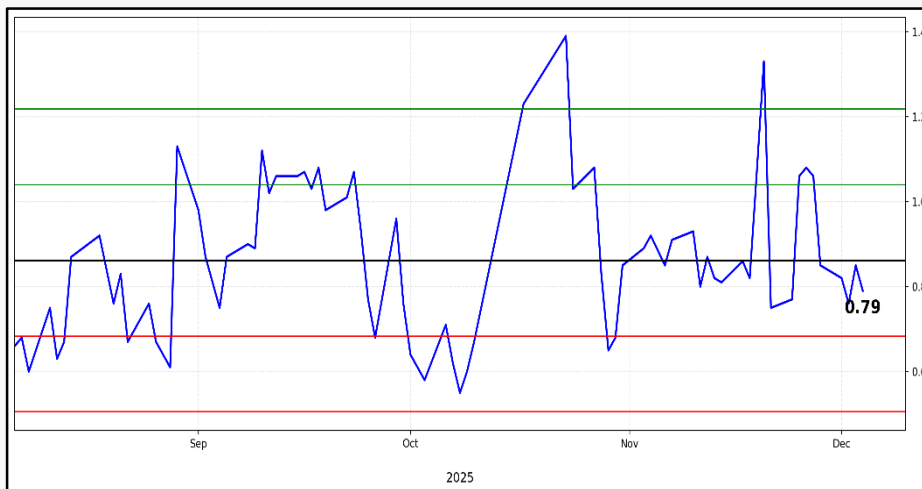
Nifty



Bank Nifty



Fin Nifty

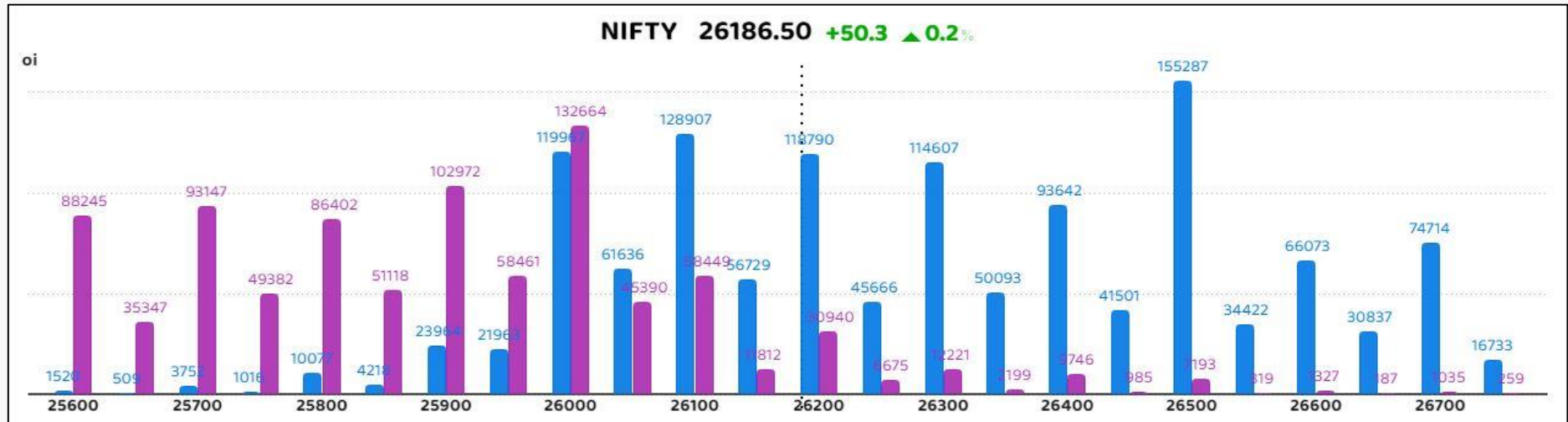


Midcap Select Nifty



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.

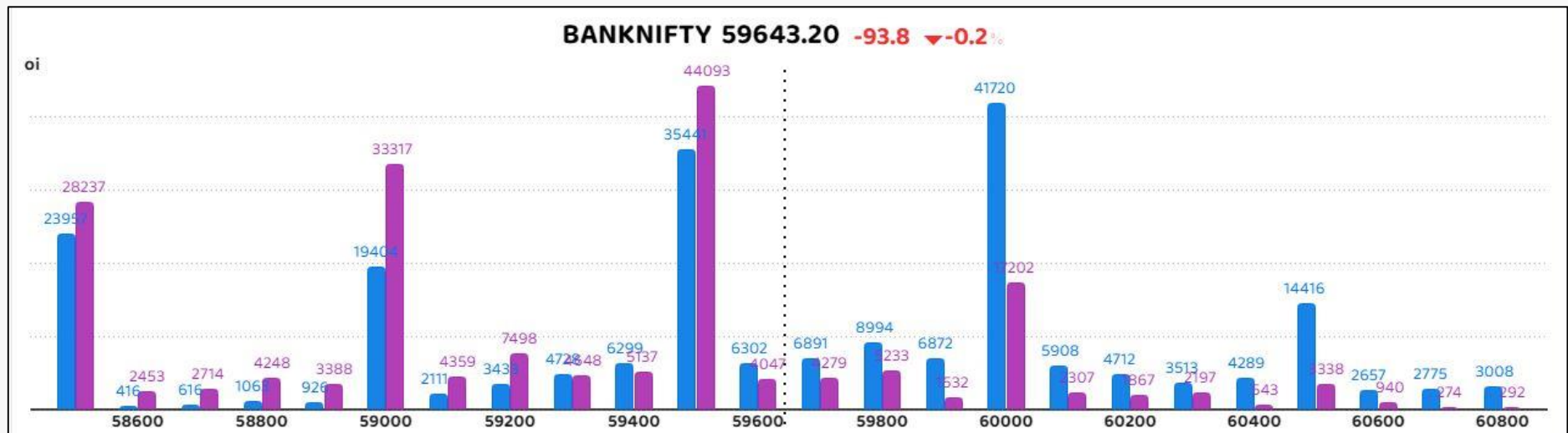
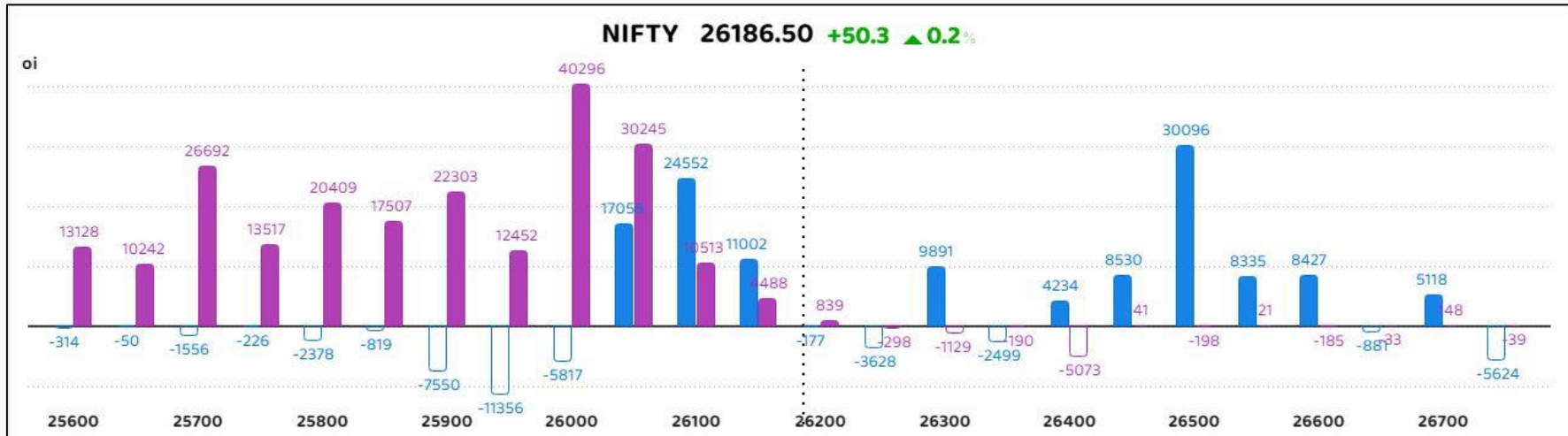


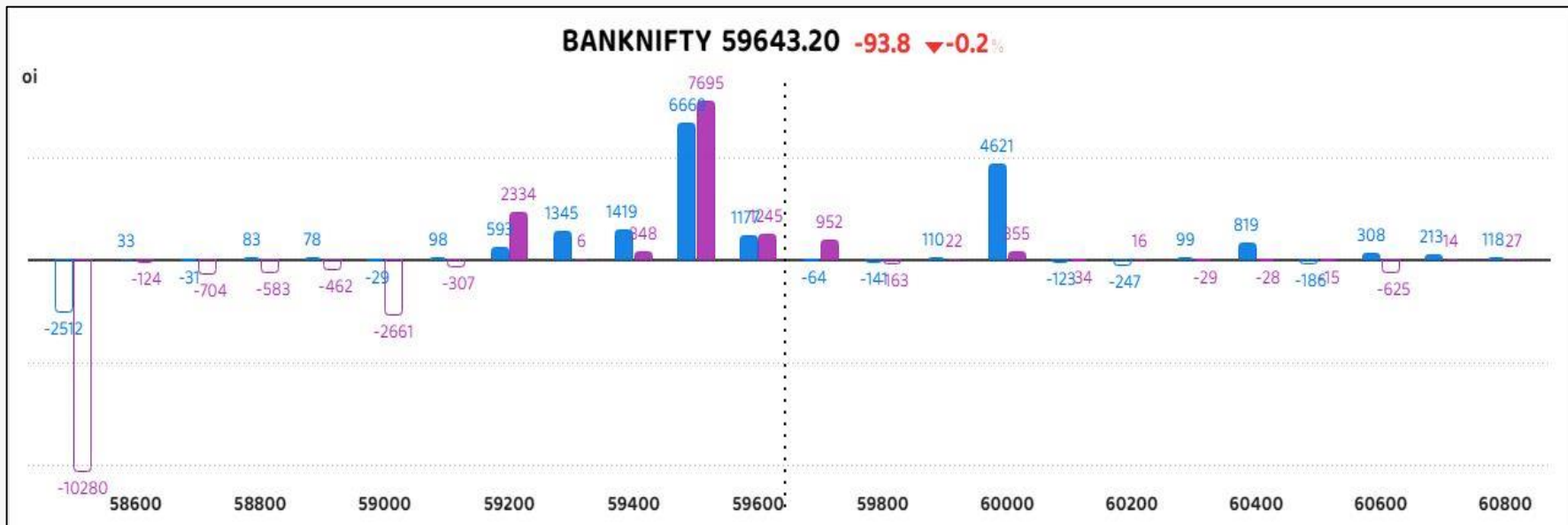
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,500 Call and the 26,000 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	997.2	-0.3	15.8	28.0	1.5	54.0
ICICI LOMBARD GE	1,983.0	0.5	21.3	38.2	3.2	51.8
CANARA BANK	147.4	0.9	26.1	44.7	6.6	51.2
KOTAK MAHINDRA	2,135.4	-0.5	17.1	32.4	1.1	51.2
BOSCH LTD	36,845.0	0.7	19.4	36.2	2.1	50.8

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BHARTI AIRTEL	2,103.8	0.9	4.9	65.2	4.9	0.0
HINDUSTAN UNILEV	2,462.2	0.6	0.8	25.8	0.8	0.0
MAHINDRA & MAHIN	3,671.6	0.6	11.0	43.5	11.0	0.0
NTPC LTD	323.0	0.0	16.1	116.6	14.9	1.2
LUPIN LTD	2,092.0	0.6	20.3	40.7	20.0	1.4

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KAYNES TECHNOLOG	4,978.0	-6.2	40.1	49.4	30.3	83.5
VODAFONE IDEA LT	10.7	1.2	59.2	212.9	10.0	53.1
BIOCON LTD	388.4	-5.3	29.8	55.0	23.9	44.0
INTERGLOBE AVIAT	5,436.5	-2.8	25.4	43.2	13.2	42.4
PAGE INDUSTRIES	37,505.0	0.7	23.2	39.9	13.0	40.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHARTI AIRTEL	2,103.8	0.9	4.9	65.2	4.9	0.0
HINDUSTAN UNILEV	2,462.2	0.6	0.8	25.8	0.8	0.0
MAHINDRA & MAHIN	3,671.6	0.6	11.0	43.5	11.0	0.0
MANKIND PHARMA L	2,206.3	0.0	21.5	40.7	21.5	0.0
PNB HOUSING FINA	882.3	0.5	22.6	58.6	22.6	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	1,269.8	0.9	15,403	2,604	5.9
BDL	1,528.0	3.0	24,523	4,778	5.1
TATACONSUM	1,148.4	0.7	9,514	1,973	4.8
CROMPTON	258.9	1.2	6,742	1,403	4.8
GODREJPROP	2,079.6	0.6	4,979	1,039	4.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
INDIGO	5,436.5	-2.8	68,574	1,03,808	1.5
AUBANK	948.8	0.0	2,079	1,706	0.8
POWERINDIA	20,085.0	-8.1	29,507	23,447	0.8
ETERNAL	295.8	-0.7	19,829	15,423	0.8
AMBER	6,750.0	-3.9	10,865	8,089	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INDIANB	802.6	-1.3	9,843	9,569	100.0
JSWSTEEL	1,150.6	0.6	25,360	23,659	100.0
KAYNES	4,978.0	-6.2	45,987	39,309	100.0
POWERINDIA	20,085.0	-8.1	8,183	9,311	87.9
BIOCON	388.4	-5.3	12,807	15,687	81.6

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
KAYNES	4,978.0	-6.2	22,624	13,917	100.0
TMPV	356.4	-0.1	38,033	41,434	91.8
JSWENERGY	459.8	-2.2	9,096	10,025	90.7
INDIANB	802.6	-1.3	4,360	5,250	83.0
GAIL	170.6	0.2	13,811	16,815	82.1

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
KAYNES	4,978.0	-6.2	1,46,305	1,52,734	95.8
KFINTECH	1,075.5	0.4	24,658	37,784	65.3
IDEA	10.7	1.2	54,114	90,380	59.9
POWERINDIA	20,085.0	-8.1	29,507	60,733	48.6
HINDUNILVR	2,462.2	0.6	1,12,214	2,73,520	41.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
KAYNES	4,978.0	-6.2	1,08,681	85,623	100.0
INDIGO	5,436.5	-2.8	1,03,808	1,29,209	80.3
POWERINDIA	20,085.0	-8.1	23,447	30,860	76.0
KFINTECH	1,075.5	0.4	12,251	24,816	49.4
BIOCON	388.4	-5.3	18,036	36,977	48.8

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ANGELONE	2,625.0	-1.7	15,973	9,136	1.7
JSWSTEEL	1,150.6	0.6	25,360	14,691	1.7
INDIANB	802.6	-1.3	9,843	5,706	1.7
KAYNES	4,978.0	-6.2	45,987	26,895	1.7
POWERINDIA	20,085.0	-8.1	8,183	5,001	1.6

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
KAYNES	4,978.0	-6.2	22,624	10,126	2.2
JSWSTEEL	1,150.6	0.6	13,048	7,774	1.7
GAIL	170.6	0.2	13,811	9,087	1.5
INDIGO	5,436.5	-2.8	17,798	12,726	1.4
COFORGE	1,966.2	2.8	9,676	6,932	1.4

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
KAYNES	4,978.0	-6.2	1,46,305	51,752	2.8
KFINTECH	1,075.5	0.4	24,658	9,131	2.7
COFORGE	1,966.2	2.8	55,386	24,192	2.3
HINDUNILVR	2,462.2	0.6	1,12,214	52,261	2.1
INDIGO	5,436.5	-2.8	68,574	33,161	2.1

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INDIGO	5,436.5	-2.8	1,03,808	18,600	5.6
KAYNES	4,978.0	-6.2	1,08,681	21,366	5.1
KFINTECH	1,075.5	0.4	12,251	3,218	3.8
HINDUNILVR	2,462.2	0.6	66,089	23,075	2.9
POWERINDIA	20,085.0	-8.1	23,447	8,827	2.7

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	2300	2511243	3.7%	2218	2300	909078	3.7%	JIOFIN	310	9066300	2.6%	302	300	6984200	-0.7%
ADANIPTS	1600	2025875	6.3%	1506	1500	773300	-0.4%	JSWSTEEL	1200	5033475	4.3%	1151	1100	1544400	-4.4%
APOLLOHOSP	7500	354750	4.2%	7201	7500	116500	4.2%	KOTAKBANK	2200	1016800	3.0%	2135	2100	870800	-1.7%
ASIANPAINT	3000	786750	1.4%	2957	2900	644000	-1.9%	LT	4100	607250	2.9%	3984	4000	379225	0.4%
AXISBANK	1300	2628750	1.6%	1280	1280	959375	0.0%	M&M	3800	1080000	3.5%	3672	3700	499000	0.8%
BAJAJ-AUTO	9500	241725	4.6%	9085	9000	159375	-0.9%	MARUTI	16500	242750	3.2%	15994	15000	236750	-6.2%
BAJAJFINSV	2100	717750	2.5%	2049	1880	363000	-8.3%	MAXHEALTH	1160	600075	7.0%	1084	1160	461475	7.0%
BAJFINANCE	1100	3012000	6.9%	1029	1000	1774500	-2.8%	NESTLEIND	1320	2331000	6.2%	1242	1180	329000	-5.0%
BEL	420	9131400	3.2%	407	400	4441725	-1.8%	NTPC	330	4624500	2.2%	323	300	2334000	-7.1%
BHARTIARTL	2200	2517500	4.6%	2104	2100	1454925	-0.2%	ONGC	250	9832500	3.2%	242	250	1761750	3.2%
CIPLA	1660	942000	9.1%	1521	1410	565500	-7.3%	POWERGRID	280	4824100	4.1%	269	250	2177400	-7.1%
COALINDIA	380	2814750	0.3%	379	375	1676700	-1.1%	RELIANCE	1600	9860500	4.2%	1536	1500	2439000	-2.3%
DRREDDY	1300	1616250	1.8%	1278	1140	386875	-10.8%	SBILIFE	2200	278625	9.8%	2003	1900	306375	-5.1%
EICHERMOT	7300	346675	2.8%	7100	6300	241325	-11.3%	SBIN	1000	9446250	5.5%	948	950	3126000	0.2%
ETERNAL	310	12622125	4.8%	296	300	4622050	1.4%	SHRIRAMFIN	880	2639175	6.3%	828	800	1899975	-3.4%
GRASIM	2800	661250	2.5%	2730	2700	570000	-1.1%	SUNPHARMA	1840	1227800	1.2%	1818	1700	237650	-6.5%
HCLTECH	1800	828450	8.8%	1655	1440	513450	-13.0%	TATACONSUM	1200	1227050	4.5%	1148	1070	369050	-6.8%
HDFCBANK	1000	4413750	0.3%	997	1000	3366550	0.3%	TMPV	400	11392000	12.2%	356	360	5368000	1.0%
HDFCLIFE	800	4558400	5.2%	761	700	1485000	-8.0%	TATASTEEL	180	27626500	7.9%	167	170	13574000	1.9%
HINDALCO	800	2356200	-1.3%	811	800	1559600	-1.3%	TCS	3200	1143450	-0.9%	3229	3200	674800	-0.9%
HINDUNILVR	2480	1192500	0.7%	2462	2400	580800	-2.5%	TECHM	1600	794400	2.4%	1562	1500	526800	-4.0%
ICICIBANK	1400	6580700	1.0%	1387	1400	3475500	1.0%	TITAN	4000	434700	5.3%	3800	3600	302400	-5.3%
INDIGO	6000	618900	10.4%	5437	5500	348300	1.2%	TRENT	4400	622400	4.4%	4216	4300	323000	2.0%
INFY	1600	7277600	0.2%	1598	1600	1961200	0.2%	ULTRACEMCO	12000	139500	3.4%	11608	10800	133350	-7.0%
ITC	410	9232000	1.7%	403	390	9096000	-3.2%	WIPRO	260	5898000	1.2%	257	250	3093000	-2.7%

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

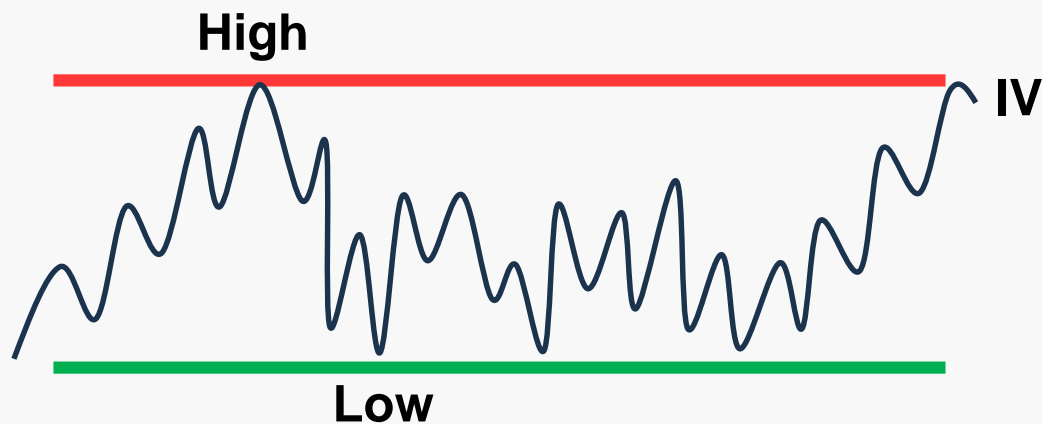
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

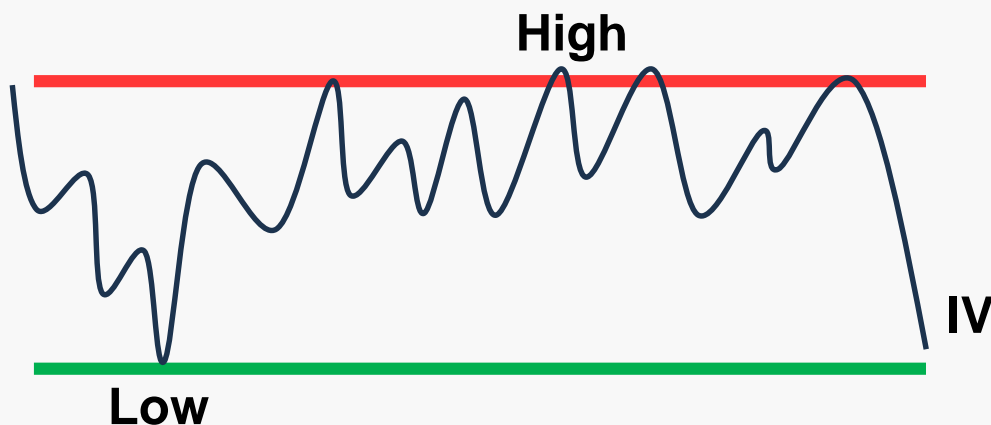
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

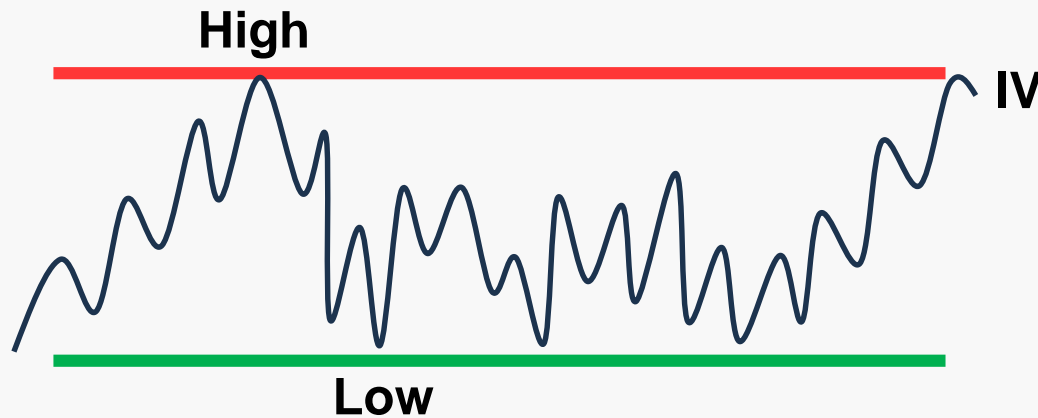


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

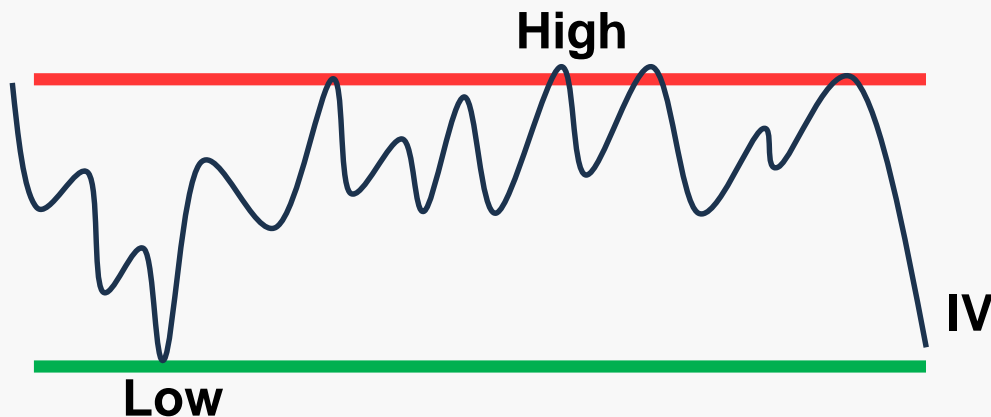


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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