



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,381	1.3%▲
Open Interest (OI)	1,49,27,150	2.6%▲
Change in OI (abs)	1,49,27,150	3,76,385▲
Premium / Discount (Abs)	176	5▲
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,817	1.2%▲
Open interest (OI)	15,70,465	9.6%▲
Change in OI (abs)	15,70,465	1,37,440▲
Premium / Discount (Abs)	289	30▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.97	0.27▼
Nifty ATM IV (%)	10.37	0.05▼
Bank Nifty ATM IV (%)	10.66	0.04▲
PCR (Nifty)	1.45	0.50▲
PCR (Bank Nifty)	1.18	0.08▲

The FII Long Ratio in Index Futures **Jump** to 18.5 %, **Up** from 17.2 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LTIM	23,48,700	10.7%	6067	2.2%
MOTHERSON	17,45,37,000	10.3%	116.96	3.9%
ASHOKLEY	12,83,45,000	10.3%	156.8	4.5%
LAURUSLABS	1,72,93,250	5.0%	1011.4	2.1%
KOTAKBANK	3,81,60,000	4.9%	2125.8	0.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KAYNES	21,83,900	22.0%	5608.5	-3.9%
ADANIENIT	1,69,89,438	10.0%	2265.6	-2.6%
TIINDIA	22,52,600	8.2%	2854.5	-1.6%
EICHERMOT	32,86,200	7.4%	7046.5	-2.5%
OFSS	13,57,125	6.1%	8210	-0.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CANBK	13,33,59,750	-5.3%	152.43	0.8%
ICICIBANK	10,58,05,000	-3.0%	1398.4	1.3%
DELHIVERY	1,73,20,025	-2.8%	427.75	1.5%
JUBLFOOD	1,80,86,250	-2.8%	609.35	0.3%
HINDUNILVR	1,44,31,200	-2.8%	2454.8	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIGREEN	2,11,48,200	-4.6%	1037.7	-0.3%
IIFL	1,33,51,800	-2.8%	572.25	-0.2%
HINDPETRO	4,15,48,950	-2.6%	465.55	-0.8%
MANAPPURAM	4,29,00,000	-2.3%	287.5	-0.8%
GMRAIRPORT	17,26,38,225	-2.2%	107.23	-0.1%

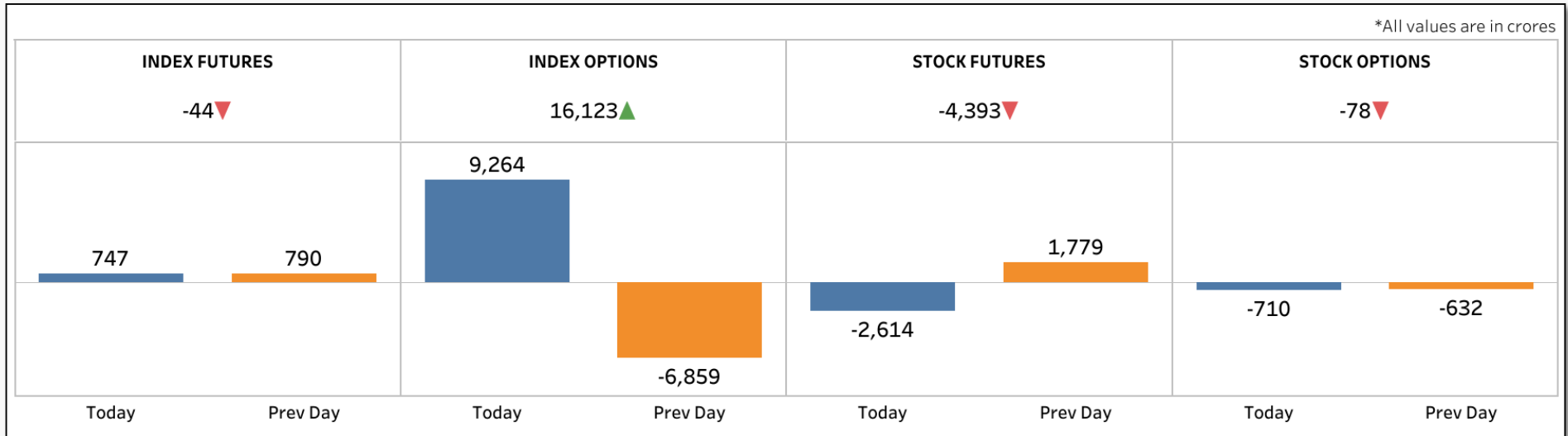
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

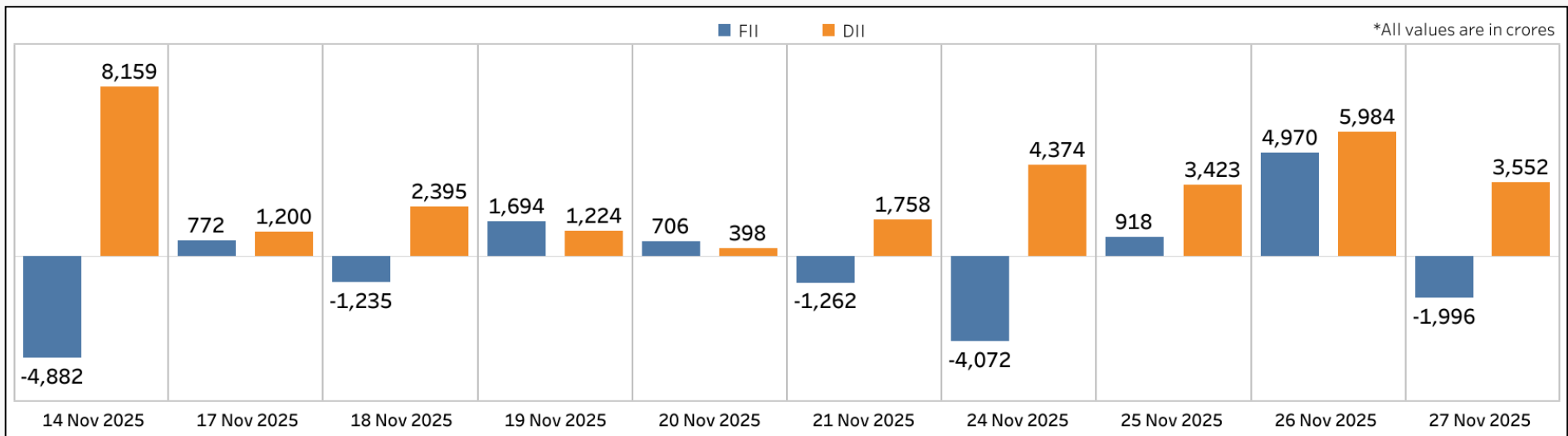
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-72,367 ▼	-458 ▼	152,944 ▲	-67,194 ▼	0	5 ▲	-3,310 ▼	26,935 ▲
913	73,280	45,745	33,370	0	228	300	6,027
3,484	3,942	-33,824	-107,199	0	223	3,610	-20,908
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
22,381	-87,263	196,796	1,329,167	1,950	42,952	27,294	-4,452,432
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
212,491 ▲	2,717 ▲	-385,362 ▼	37,633 ▲	-140,127 ▼	-2,264 ▼	235,728 ▲	2,626 ▲
14,338	277,978	39,700	2,067	124,874	61,339	-11,903	-14,529
-103	-2,820	-107,384	-198,153	-15,253	-3,609	-1,345	-174,389
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-184,176	57,165	-275,396	2,667,403	159,845	-12,854	51,306	455,862
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

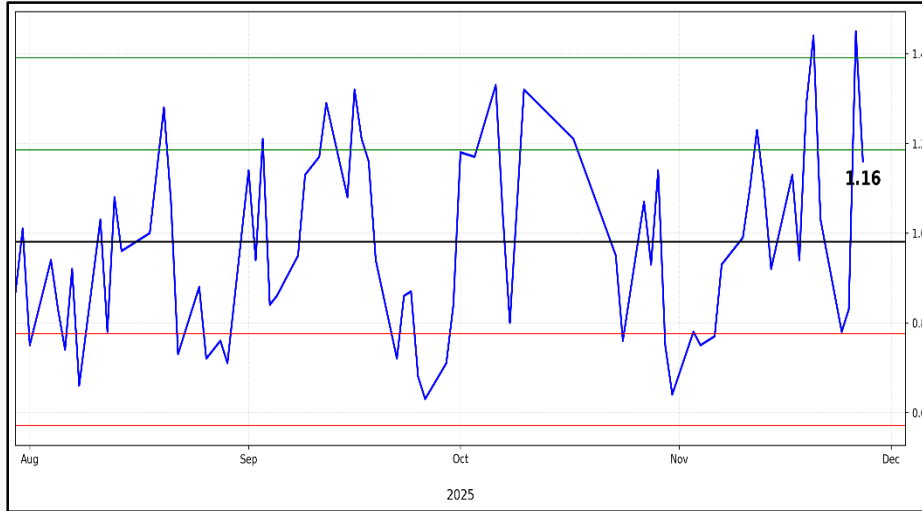
Daily Net Open Interest Change



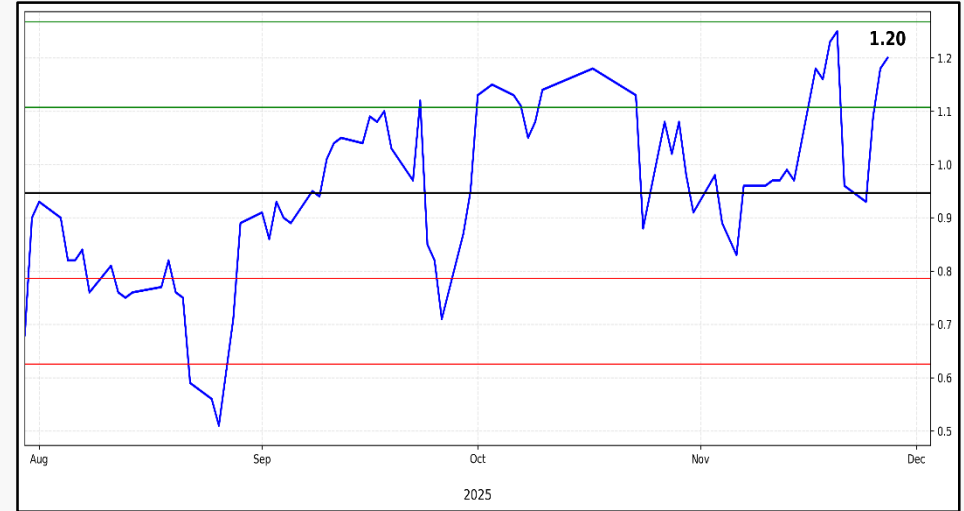
DII and FII Daily Cash Market Flows



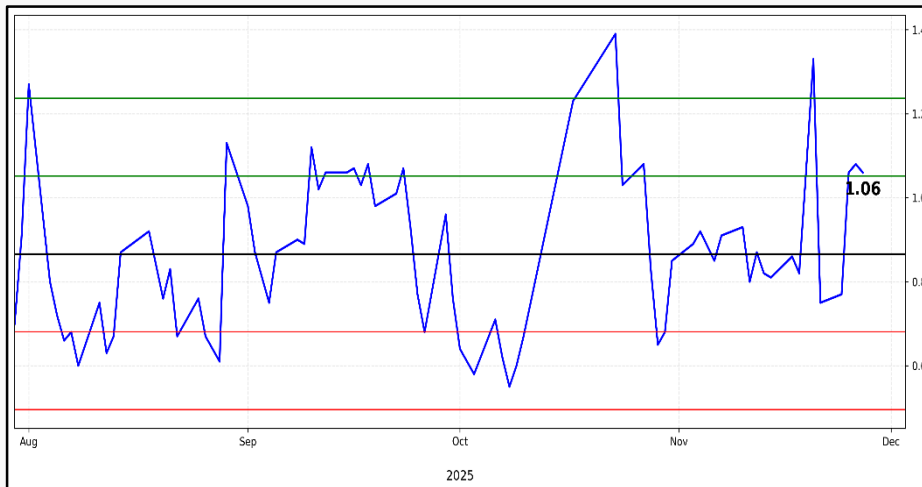
Nifty



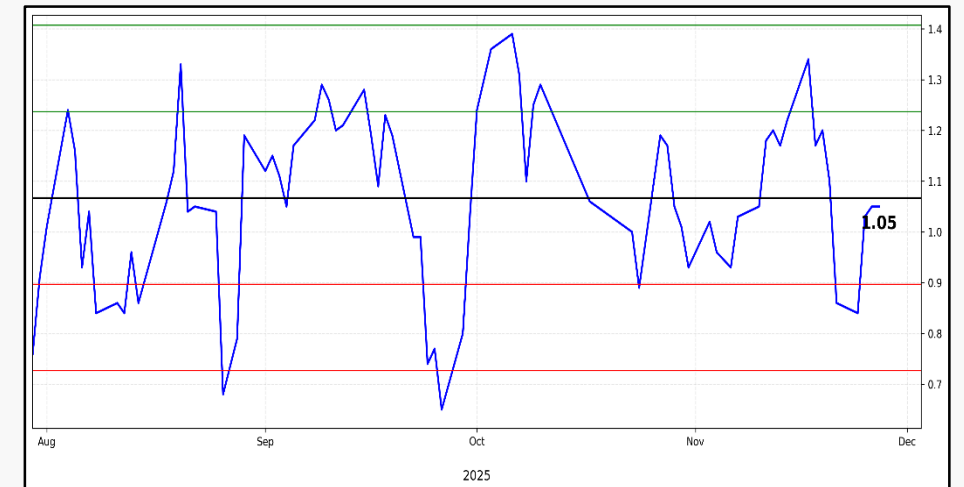
Bank Nifty



Fin Nifty

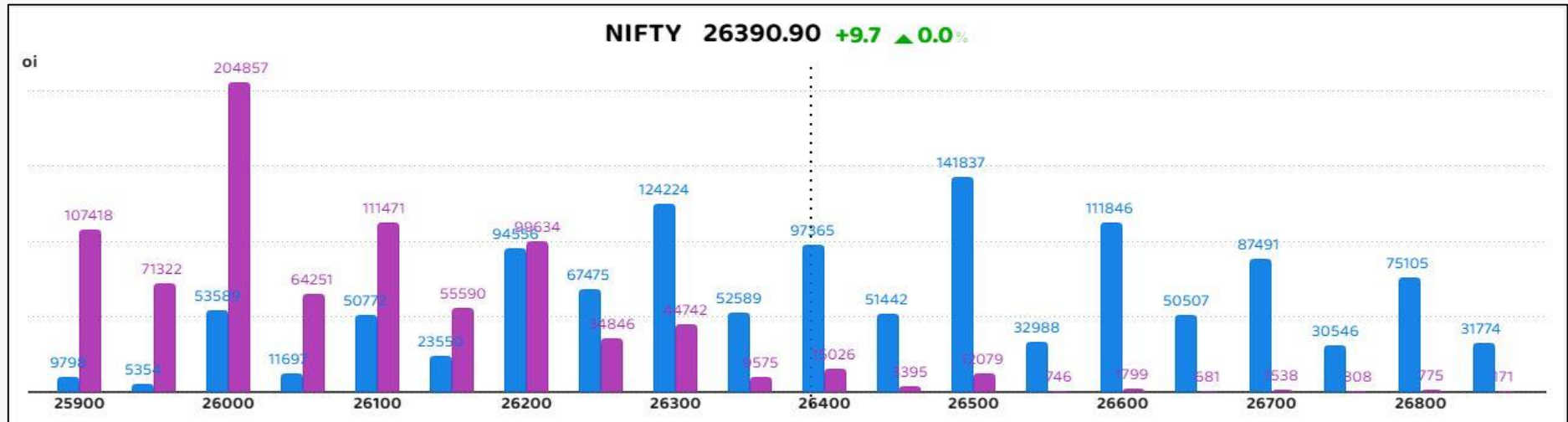


Midcap Select Nifty



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

Call  Put 



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

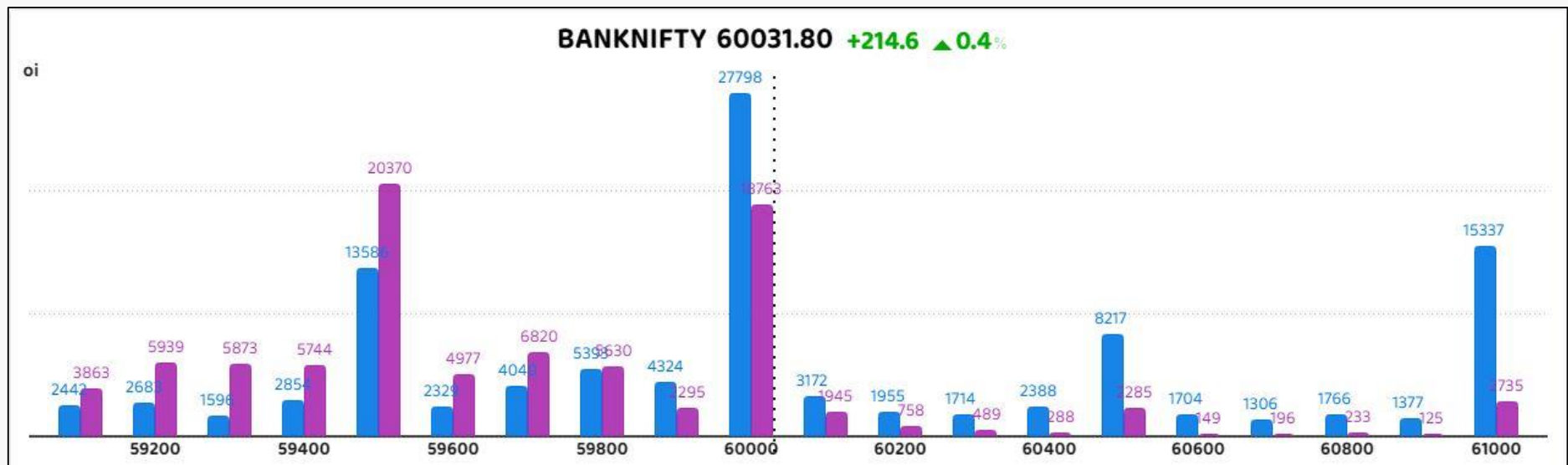
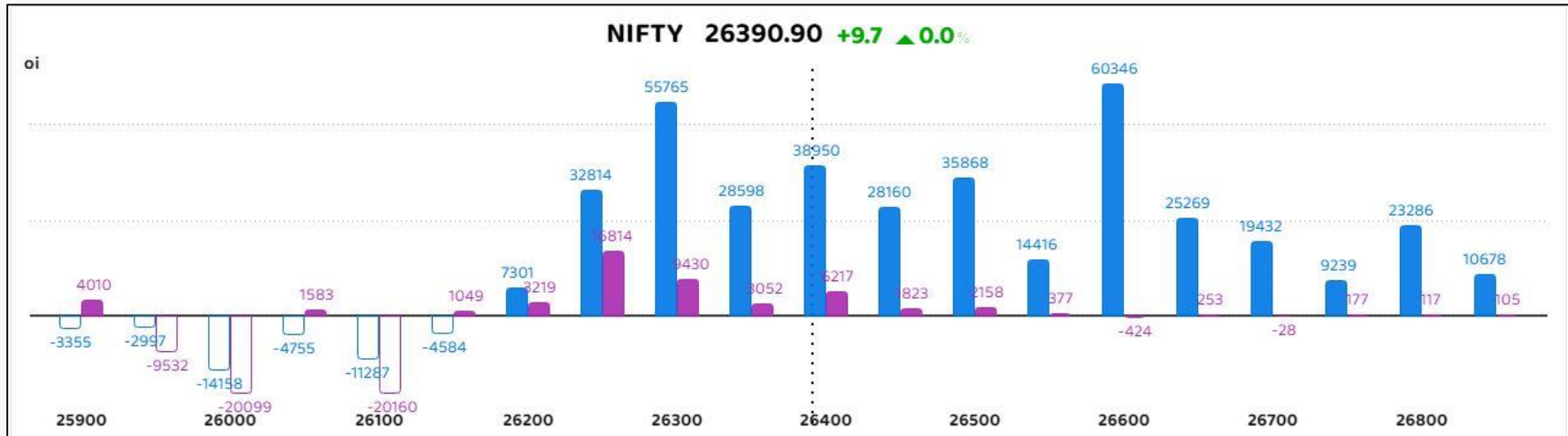


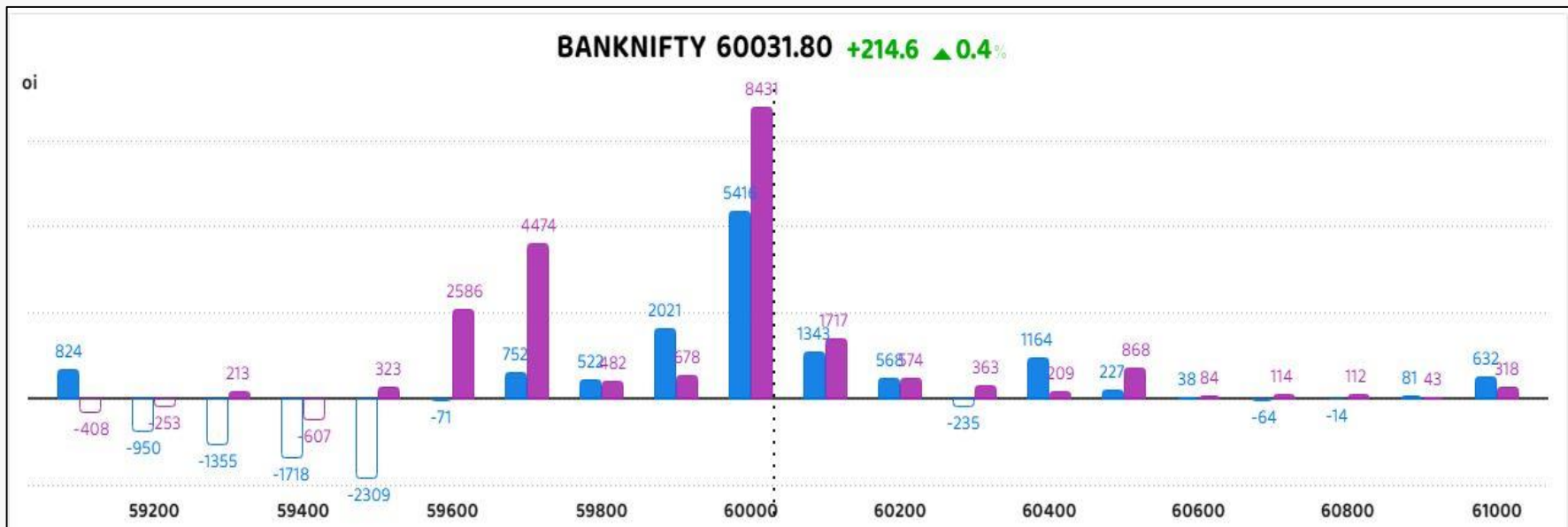
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,600 Call and the 26,000 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI LOMBARD GE	1,980.7	-1.5	21.7	38.2	3.2	52.9
HDFC BANK LTD	1,009.5	0.6	14.6	28.0	1.5	49.7
BOSCH LTD	36,320.0	-0.5	19.0	36.2	2.1	49.5
UPL LTD	758.7	-0.3	22.0	42.7	2.9	48.0
TATA CONSUMER PR	1,177.7	-0.6	18.9	34.4	5.5	46.5

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SUN PHARMA INDU	1,810.3	0.3	14.3	31.7	14.3	0.0
MARUTI SUZUKI IN	15,903.0	-1.6	15.4	29.0	15.4	0.0
ULTRATECH CEMENT	11,617.0	-1.2	14.5	31.0	14.5	0.0
BAJAJ AUTO LTD	9,022.5	-1.5	18.6	36.4	18.6	0.0
SBI LIFE INSURAN	2,004.5	-1.2	16.0	30.2	16.0	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDRAPRASTHA GAS	197.7	-0.8	39.8	63.7	22.3	81.4
BANDHAN BANK LTD	149.6	-1.0	36.7	66.9	15.9	68.0
KAYNES TECHNOLOG	5,573.5	-3.9	34.3	49.4	30.3	27.9
ICICI LOMBARD GE	1,980.7	-1.5	21.7	38.2	3.2	23.7
HINDUSTAN ZINC	474.6	0.9	25.9	54.2	21.8	20.8

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SUN PHARMA INDU	1,810.3	0.3	14.3	31.7	14.3	0.0
MARUTI SUZUKI IN	15,903.0	-1.6	15.4	29.0	15.4	0.0
ULTRATECH CEMENT	11,617.0	-1.2	14.5	31.0	14.5	0.0
AVENUE SUPERMART	4,007.1	-0.3	19.5	62.3	19.5	0.0
BAJAJ AUTO LTD	9,022.5	-1.5	18.6	36.4	18.6	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	1,218.9	2.0	6,797	1,210	5.6
RVNL	324.6	0.3	13,266	2,990	4.4
TITAGARH	838.0	-1.2	6,725	1,532	4.4
SONACOMS	509.5	0.5	8,770	2,049	4.3
SRF	2,840.0	1.1	15,534	3,858	4.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
TATACONSUM	1,177.7	-0.6	4,463	4,383	1.0
HEROMOTOCO	6,151.0	0.2	19,250	16,076	0.8
FEDERALBNK	254.9	-0.6	6,699	5,517	0.8
SBILIFE	2,004.5	-1.2	4,311	3,509	0.8
AUBANK	947.2	-0.7	3,740	2,854	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
JSWSTEEL	1,160.6	0.5	15,068	21,784	69.2
HINDUNILVR	2,451.7	1.1	30,435	45,551	66.8
RVNL	324.6	0.3	10,096	15,990	63.1
TMPV	357.8	-0.4	58,792	1,07,899	54.5
KAYNES	5,573.5	-3.8	20,650	39,309	52.5

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
TMPV	357.8	-0.4	33,737	41,434	81.4
JSWENERGY	488.0	0.2	7,807	10,025	77.9
INOXWIND	134.1	-2.0	4,817	6,446	74.7
KAYNES	5,573.5	-3.8	8,993	12,547	71.7
RECLTD	362.2	1.6	17,933	25,523	70.3

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ASHOKLEY	159.8	7.3	63,246	1,28,968	49.0
KAYNES	5,573.5	-3.8	57,618	1,52,734	37.7
MOTHERSON	116.1	3.9	25,541	82,490	31.0
IDEA	10.1	0.3	25,746	90,380	28.5
HINDUNILVR	2,451.7	1.1	62,734	2,73,520	22.9

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ASHOKLEY	159.8	7.3	27,290	57,453	47.5
KAYNES	5,573.5	-3.8	30,848	85,623	36.0
INDIANB	865.9	-2.4	3,086	13,433	23.0
EICHERMOT	6,999.0	-2.8	22,747	1,15,506	19.7
TATAPOWER	392.0	0.1	19,943	1,03,355	19.3

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
EICHERMOT	6,999.0	-2.8	13,536	11,297	1.2
JSWSTEEL	1,160.6	0.5	15,068	12,751	1.2
SAMMAANCAP	155.5	-0.8	8,943	8,108	1.1
RVNL	324.6	0.3	10,096	10,208	1.0
TMPV	357.8	-0.4	58,792	60,174	1.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
JSWENERGY	488.0	0.2	7,807	5,745	1.4
TMPV	357.8	-0.4	33,737	27,565	1.2
INOXWIND	134.1	-2.0	4,817	4,118	1.2
HINDUNILVR	2,451.7	1.1	18,866	16,245	1.2
EICHERMOT	6,999.0	-2.8	10,338	9,176	1.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ASHOKLEY	159.8	7.3	63,246	19,793	3.2
HINDUNILVR	2,451.7	1.1	62,734	33,206	1.9
TATAPOWER	392.0	0.1	45,625	28,697	1.6
PAYTM	1,293.1	0.5	30,670	19,515	1.6
LAURUSLABS	1,003.2	1.7	27,191	17,466	1.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ASHOKLEY	159.8	7.3	27,290	8,973	3.0
HINDUNILVR	2,451.7	1.1	29,605	11,980	2.5
KAYNES	5,573.5	-3.8	30,848	16,743	1.8
TATAPOWER	392.0	0.1	19,943	12,721	1.6
KOTAKBANK	2,110.2	0.3	21,772	16,214	1.3

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	1267827	6.4%	2255	2300	523755	2.0%	JIOFIN	310	6410800	1.2%	306	300	5144150	-2.1%
ADANIPTS	1500	1119100	-0.6%	1509	1500	943350	-0.6%	JSWSTEEL	1200	2891025	3.4%	1161	1000	741150	-13.8%
APOLLOHOSP	7500	200375	2.4%	7323	7500	119000	2.4%	KOTAKBANK	2200	1836400	4.3%	2110	2100	1091600	-0.5%
ASIANPAINT	2900	618000	0.7%	2879	2600	438750	-9.7%	LT	4100	331450	0.5%	4081	4000	358050	-2.0%
AXISBANK	1300	1911875	1.0%	1287	1280	818750	-0.6%	M&M	3700	670600	0.5%	3681	3700	447400	0.5%
BAJAJ-AUTO	10000	251025	10.8%	9023	9000	123750	-0.2%	MARUTI	16500	175650	3.8%	15903	15000	210650	-5.7%
BAJAJFINSV	2100	526250	-0.2%	2103	1880	325250	-10.6%	MAXHEALTH	1200	447300	3.3%	1162	1160	455700	-0.2%
BAJFINANCE	1100	2034750	6.4%	1034	1000	2177250	-3.3%	NESTLEIND	1320	998500	4.2%	1266	1180	282000	-6.8%
BEL	420	5530425	1.7%	413	410	3572475	-0.7%	NTPC	330	3073500	0.8%	327	300	2035500	-8.4%
BHARTIARTL	2200	1884325	4.0%	2116	2100	1320975	-0.7%	ONGC	250	5330250	2.5%	244	250	2036250	2.5%
CIPLA	1660	653250	8.8%	1525	1380	354000	-9.5%	POWERGRID	280	3480800	2.3%	274	250	2563100	-8.7%
COALINDIA	380	1965600	0.5%	378	375	1634850	-0.8%	RELIANCE	1600	4083500	2.3%	1563	1500	2640500	-4.1%
DRREDDY	1300	829375	4.1%	1249	1140	397500	-8.7%	SBILIFE	2200	283125	9.8%	2005	1840	281625	-8.2%
EICHERMOT	7300	336175	4.3%	6999	6300	239050	-10.0%	SBIN	1000	6402000	2.8%	973	980	2991750	0.7%
ETERNAL	310	9493875	2.4%	303	300	4823325	-0.9%	SHRIRAMFIN	880	2459325	1.4%	868	800	1131075	-7.8%
GRASIM	2800	449750	2.2%	2740	2700	566500	-1.5%	SUNPHARMA	1840	456400	1.6%	1810	1800	232750	-0.6%
HCLTECH	1800	884100	10.5%	1629	1440	535150	-11.6%	TATACONSUM	1200	770000	1.9%	1178	1070	399300	-9.1%
HDFCBANK	1000	3119050	-0.9%	1010	1000	2811050	-0.9%	TMPV	400	8700000	11.8%	358	360	4548000	0.6%
HDFCLIFE	800	1875500	2.9%	778	710	800800	-8.7%	TATASTEEL	175	23991000	4.1%	168	170	13095500	1.1%
HINDALCO	800	3525900	-0.9%	808	800	1465100	-0.9%	TCS	3200	1381800	2.0%	3137	3200	669900	2.0%
HINDUNILVR	2500	1808400	2.0%	2452	2400	826200	-2.1%	TECHM	1600	1017600	6.0%	1510	1500	678000	-0.6%
ICICIBANK	1400	4851700	0.6%	1392	1400	2874900	0.6%	TITAN	4280	274400	9.7%	3903	3600	352100	-7.8%
INDIGO	6000	304500	1.4%	5919	5500	178950	-7.1%	TRENT	4400	505900	3.1%	4266	4300	332600	0.8%
INFY	1600	2453600	2.1%	1566	1500	1618800	-4.2%	ULTRACEMCO	12000	94900	3.3%	11617	10800	70600	-7.0%
ITC	410	8262400	1.4%	404	410	3534400	1.4%	WIPRO	260	5790000	4.2%	250	250	3387000	0.2%

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

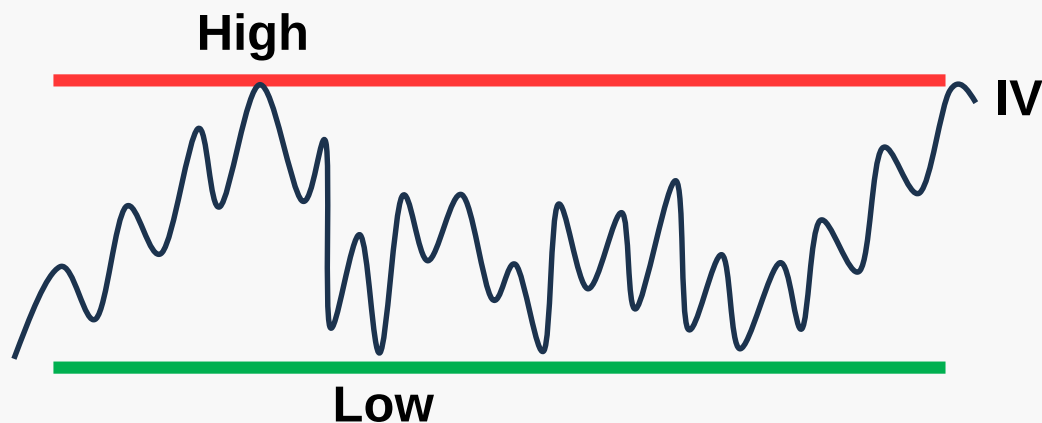
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

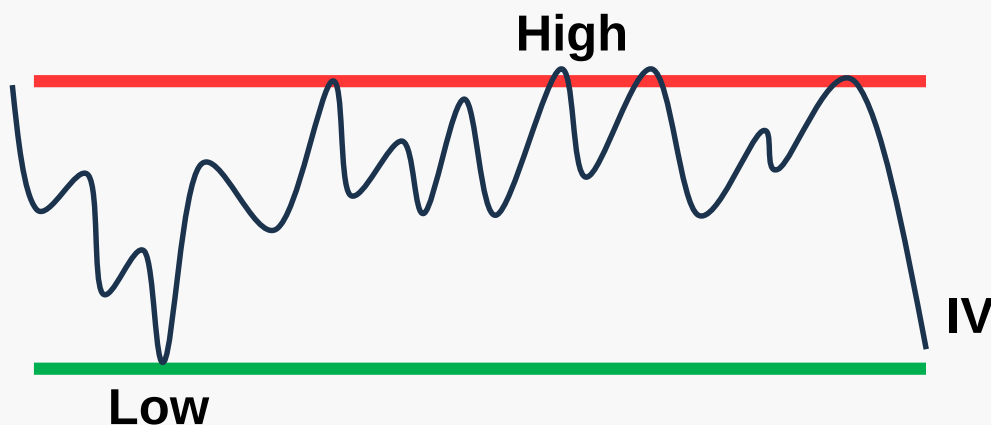
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

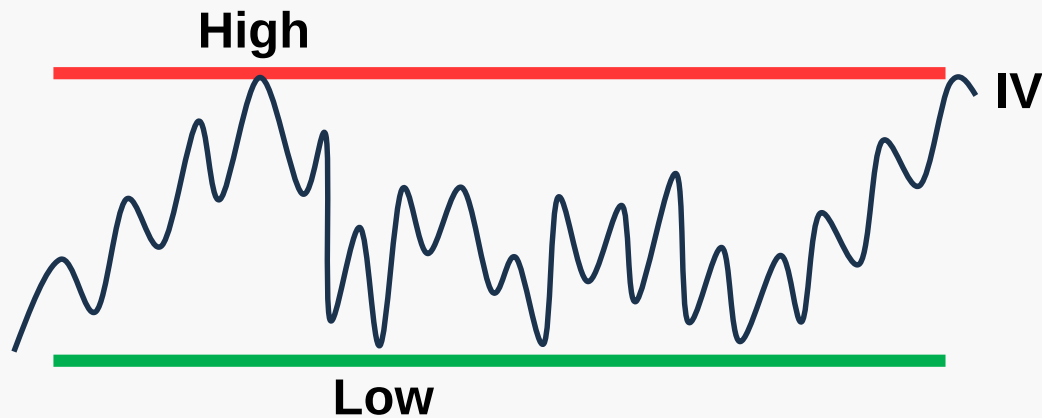


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

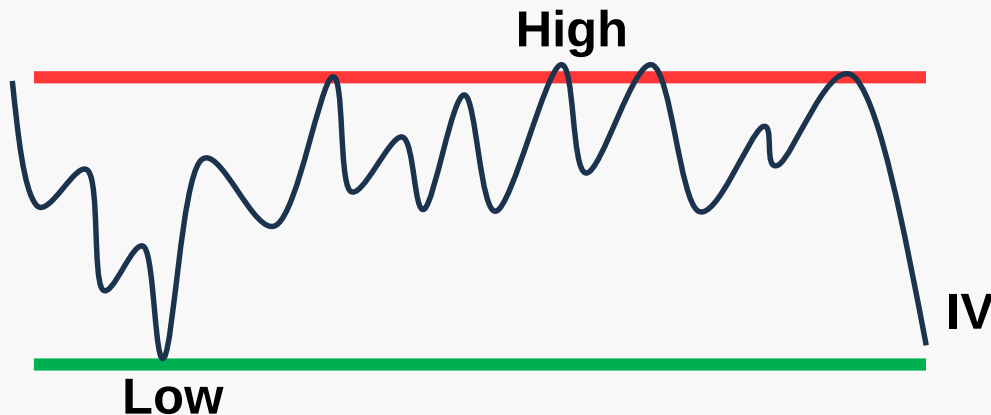


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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