



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 17.2 %, **Up** from 15.1 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SAMMAANCAP	10,56,89,700	23.6%	158	3.5%
SAIL	15,53,63,200	12.2%	137.96	3.9%
UNOMINDA	46,50,800	11.9%	1330	2.9%
KAYNES	17,89,800	10.6%	5838	0.3%
BHEL	5,63,03,625	9.8%	291.3	2.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIENT	1,54,39,185	7.7%	2326.4	-0.9%
BHARTIARTL	4,43,18,925	3.1%	2139.9	-1.4%
EICHERMOT	30,59,050	0.6%	7226.5	-0.2%
ASIANPAINT	1,07,23,250	0.5%	2889.2	0.0%
NYKAA	6,03,65,625	-0.1%	262.64	-1.7%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RVNL	4,07,03,375	-5.5%	315.25	3.7%
KEI	9,45,525	-5.2%	4151.6	2.6%
LTF	4,06,05,970	-4.0%	308.7	3.2%
TATATECH	1,06,28,000	-3.8%	688.95	2.4%
IIFL	1,37,32,950	-3.7%	573.3	2.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	6,03,65,625	-0.1%	262.64	-1.7%
EICHERMOT	30,59,050	0.6%	7226.5	-0.2%
BHARTIARTL	4,43,18,925	3.1%	2139.9	-1.4%
ADANIENT	1,54,39,185	7.7%	2326.4	-0.9%

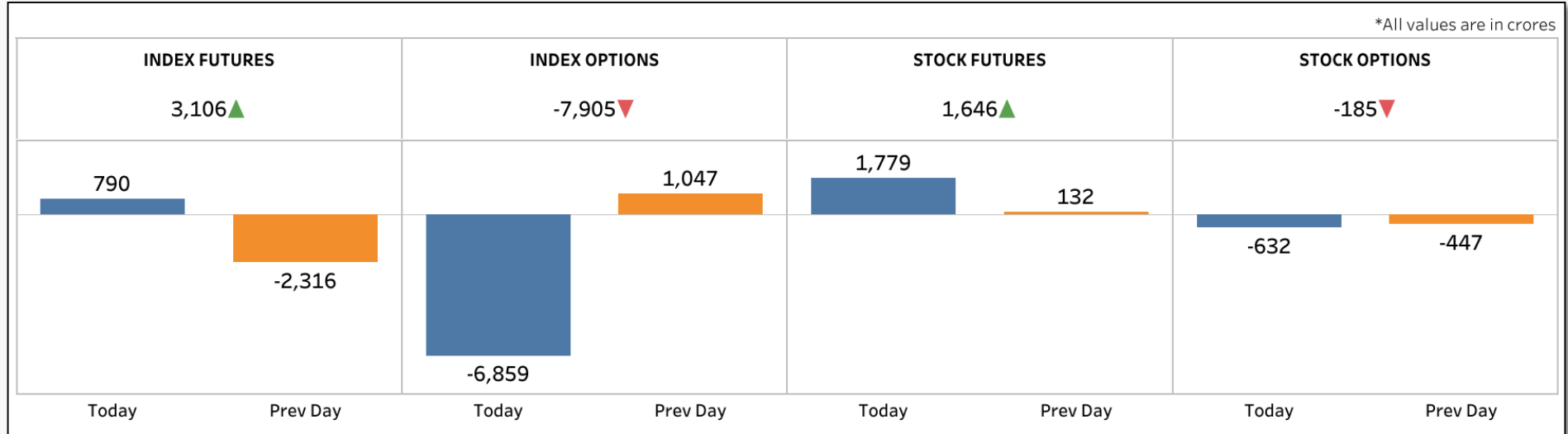
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

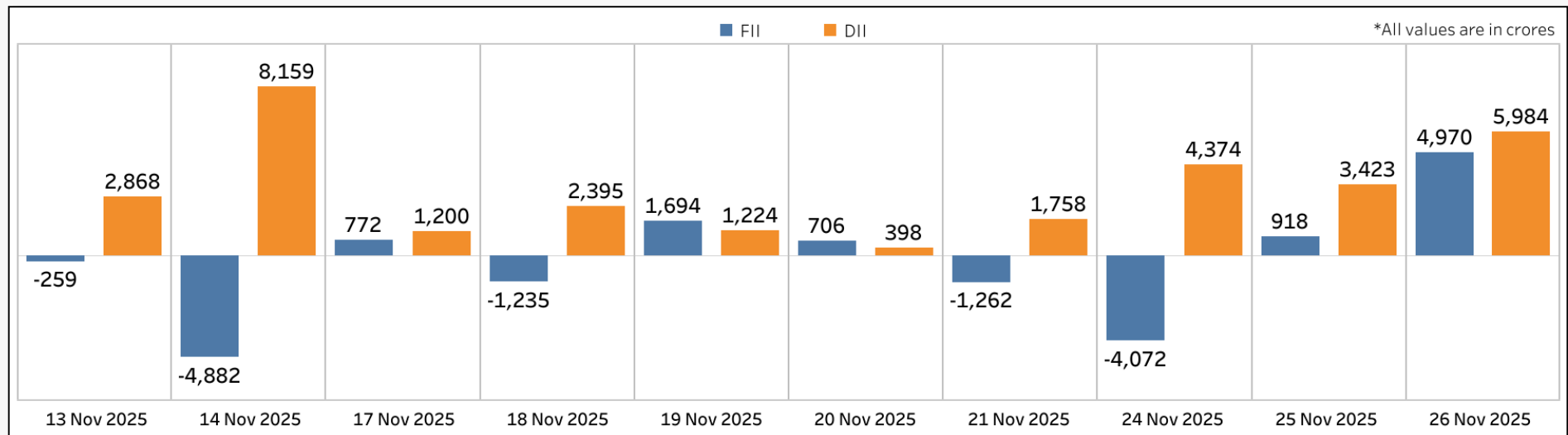
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
130,172 ▲	-63,066 ▼	-76,432 ▼	52,913 ▲	431 ▲	-170 ▼	1,245 ▲	-45,492 ▼
73,280	67,008		33,370				24,584
-56,892	3,942	-30,767	-19,543	0	223	3,610	-20,908
		-107,199		-431	393	2,365	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
21,468	-90,747	151,051	1,362,991	1,950	42,724	26,994	-4,458,459
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	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
-105,821 ▼	14,454 ▲	87,547 ▲	84,315 ▲	-24,782 ▼	48,782 ▲	-12,361 ▼	-91,736 ▼
		277,978		124,874			77,207
		190,431	2,067	149,656			
-92,332	-2,820	-17,274	-82,248	-1,345	-50,127	-174,389	-14,529
-198,153							
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-198,514	57,268	-168,012	2,627,703	175,098	-9,245	-10,033	467,765
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

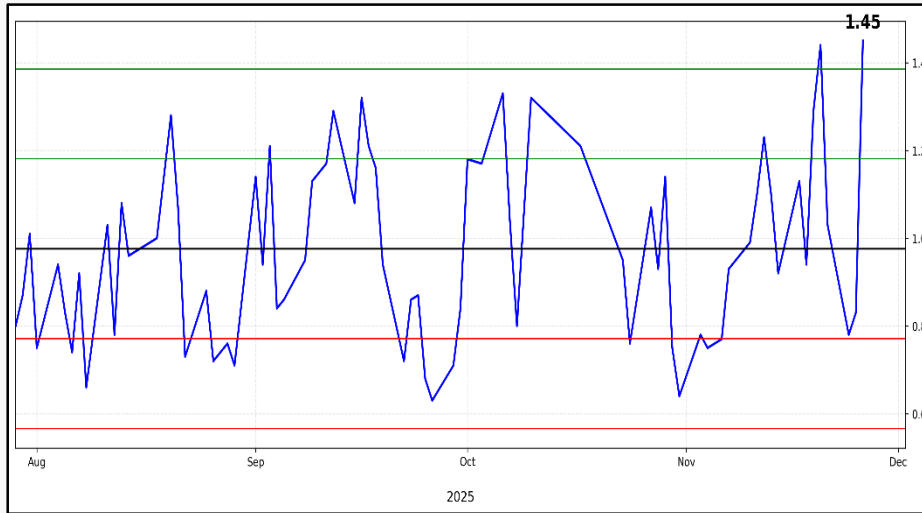
Daily Net Open Interest Change



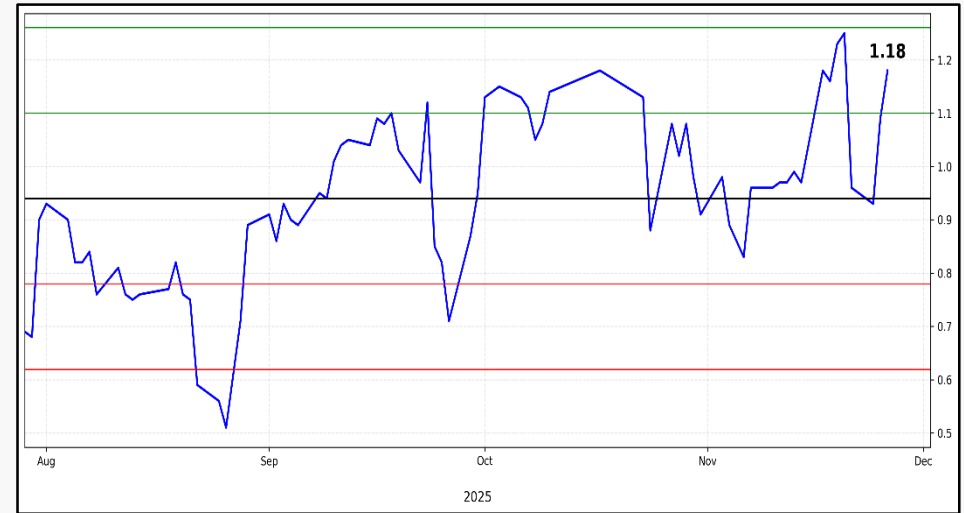
DII and FII Daily Cash Market Flows



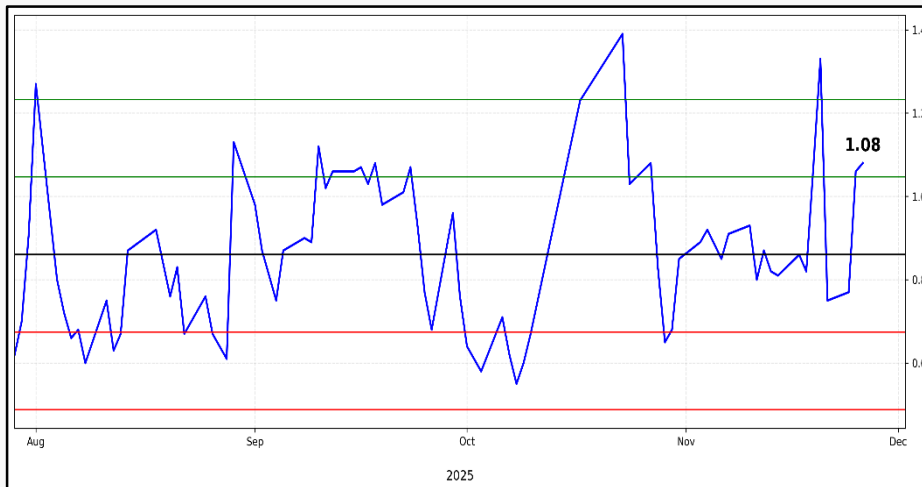
Nifty



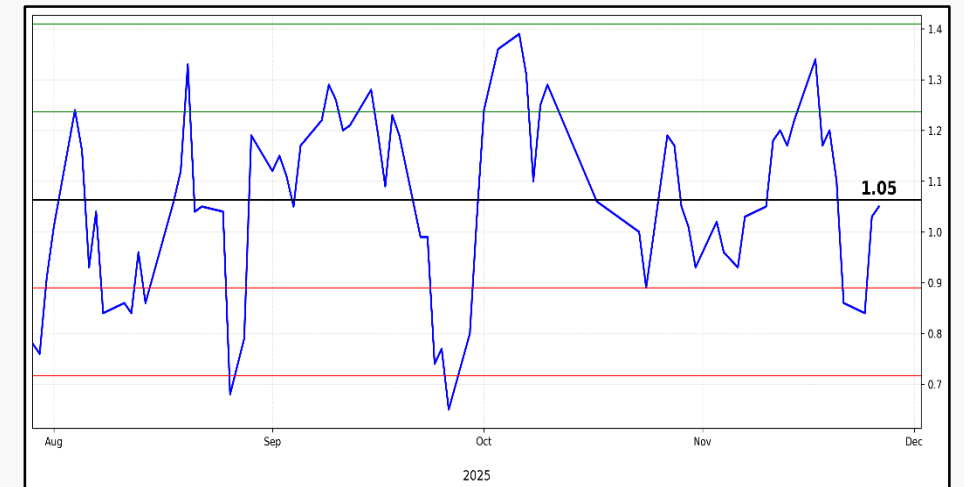
Bank Nifty



Fin Nifty

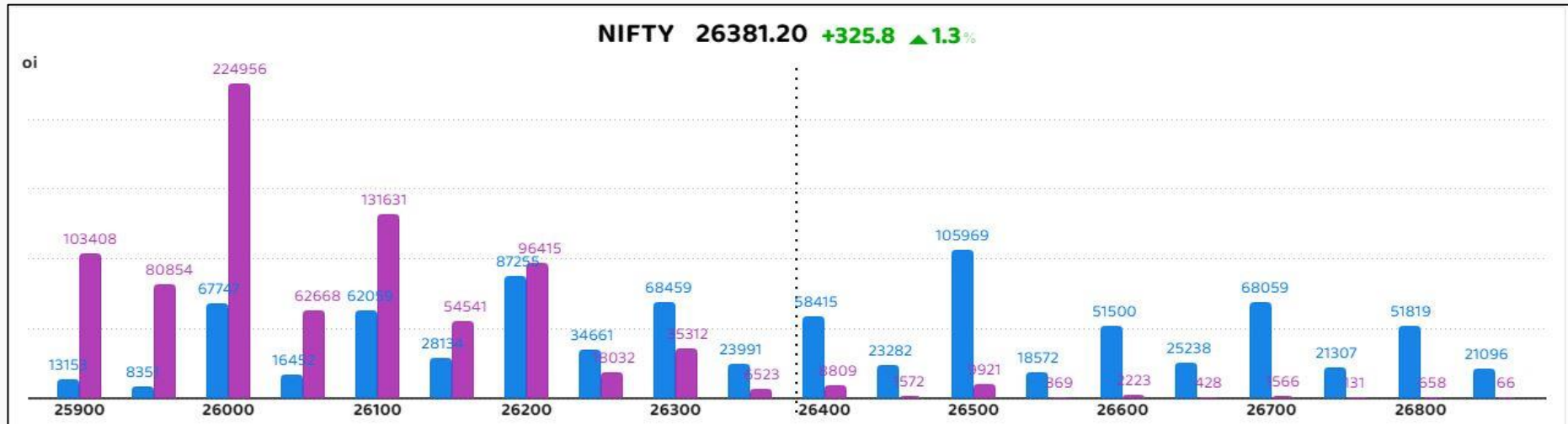


Midcap Select Nifty



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 59,000 Put saw the most amount of open interest.

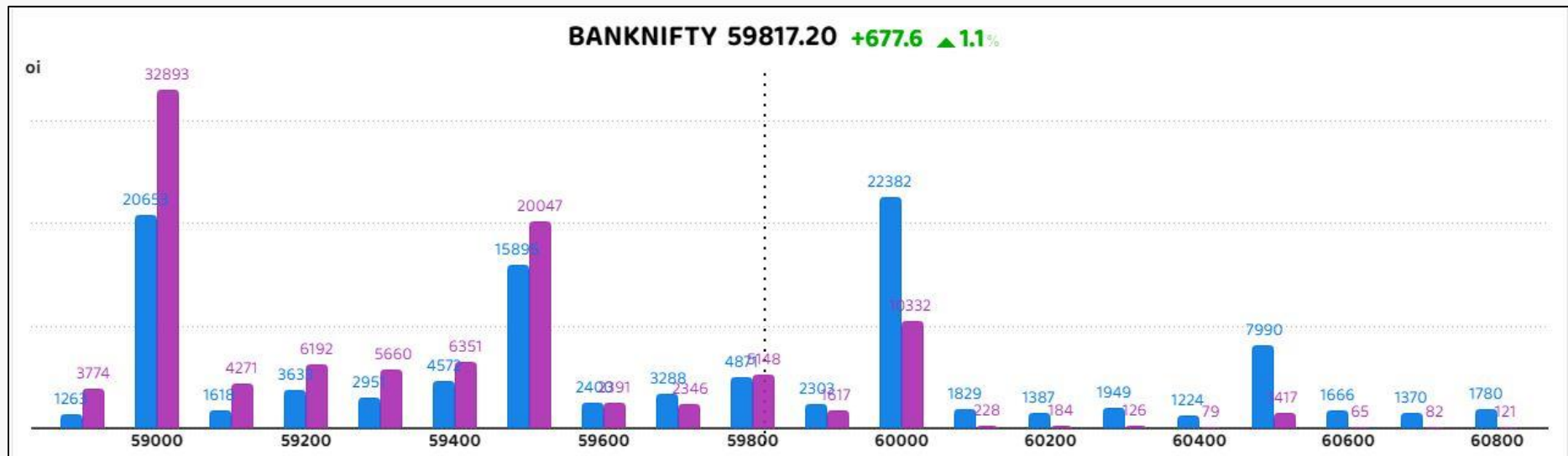
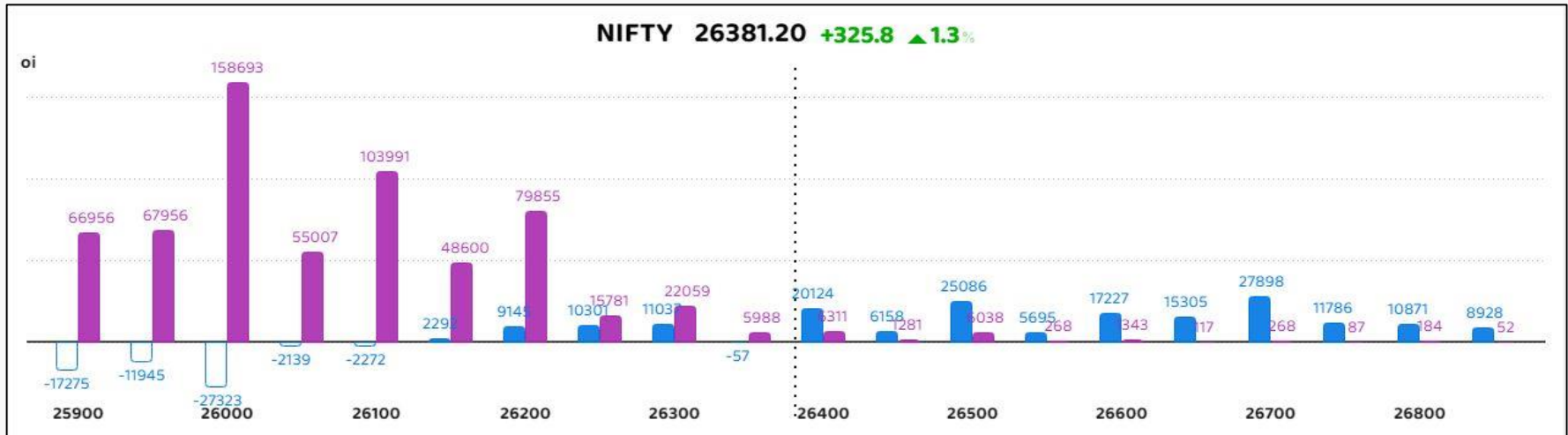


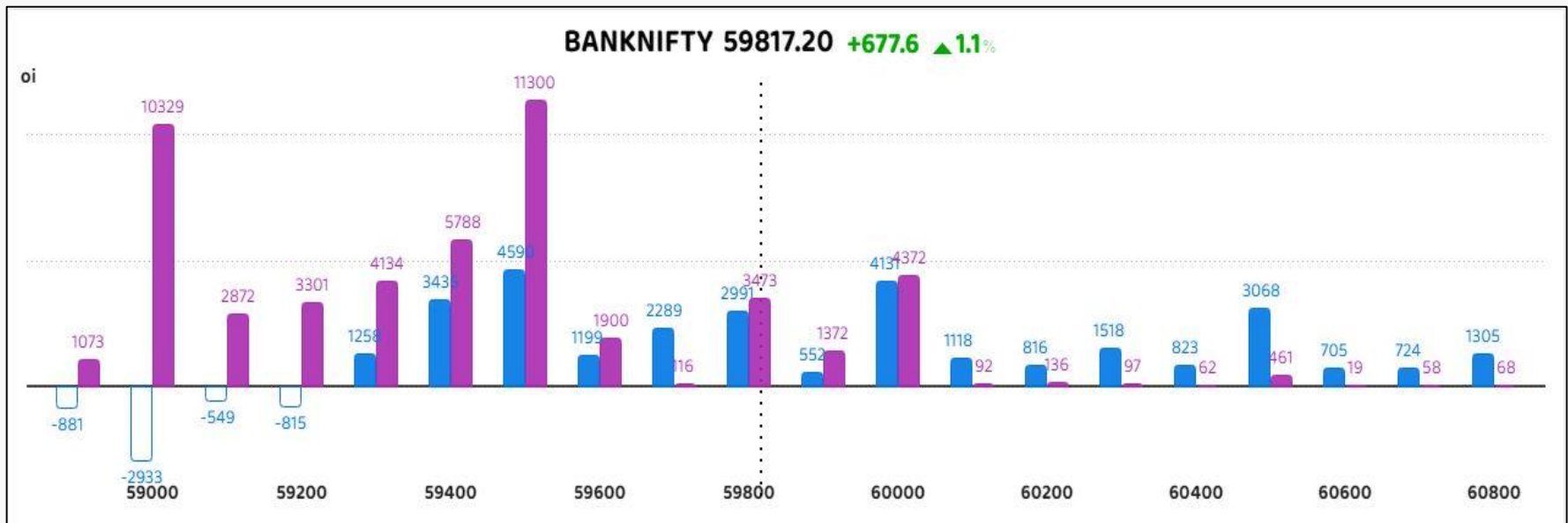
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,700 Call and the 26,000 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	36,485.0	2.0	19.1	36.2	2.1	49.9
HDFC BANK LTD	1,003.9	1.4	14.7	28.0	1.5	49.7
ICICI LOMBARD GE	2,010.3	0.6	19.9	38.2	3.2	47.7
TATA CONSUMER PR	1,185.3	0.7	19.2	34.4	5.5	47.3
CANARA BANK	150.2	1.0	23.9	44.7	6.6	45.4

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN UNILEV	2,425.2	0.5	9.1	25.8	9.1	0.0
BAJAJ FINANCE LT	1,010.7	2.5	18.5	34.0	18.5	0.0
NTPC LTD	326.1	0.7	14.9	116.6	14.9	0.0
ULTRATECH CEMENT	11,759.0	1.6	15.0	31.0	15.0	0.0
POWER GRID CORP	275.1	0.6	15.1	34.5	15.1	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDRAPRASTHA GAS	199.2	2.3	39.8	63.7	22.3	81.4
ADANI ENTERPRISE	2,315.0	-0.8	32.0	60.8	14.9	48.0
INDIAN ENERGY EX	141.8	1.1	33.3	76.3	8.0	39.3
STEEL AUTHORITY	136.9	3.5	31.0	91.3	8.4	29.3
ANGEL ONE LTD	2,749.5	2.3	38.0	72.7	22.1	26.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BAJAJ FINANCE LT	1,010.7	2.5	18.5	34.0	18.5	0.0
HINDUSTAN UNILEV	2,425.2	0.5	9.1	25.8	9.1	0.0
ULTRATECH CEMENT	11,759.0	1.6	15.0	31.0	15.0	0.0
NTPC LTD	326.1	0.7	14.9	116.6	14.9	0.0
BAJAJ FINSERV LT	2,085.1	2.7	18.1	33.8	18.1	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
IDEA	10.1	0.3	21,818	4,397	5.0
RVNL	323.6	0.2	19,007	3,962	4.8
SOLARINDS	13,460.0	1.5	4,771	1,140	4.2
BHARATFORG	1,431.3	1.5	7,783	2,016	3.9
SUPREMEIND	3,463.9	1.1	9,041	2,343	3.9

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ICICIGI	2,010.3	0.6	1,814	1,739	1.0
HEROMOTOCO	6,136.5	0.9	22,255	19,510	0.9
EICHERMOT	7,198.5	-0.3	14,333	11,673	0.8
SBILIFE	2,029.1	-0.1	6,238	4,992	0.8
HCLTECH	1,617.9	1.0	17,182	13,742	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUNILVR	2,425.2	0.5	27,113	45,551	59.5
RVNL	323.6	0.2	8,075	15,990	50.5
JSWSTEEL	1,154.4	3.8	10,949	21,784	50.3
TMPV	359.2	1.9	53,969	1,07,899	50.0
RECLTD	356.4	1.3	21,177	42,482	49.8

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
TMPV	359.2	1.9	31,360	41,434	75.7
JSWENERGY	487.2	2.2	7,495	10,025	74.8
RECLTD	356.4	1.3	17,783	25,523	69.7
INOXWIND	136.8	1.5	4,487	6,446	69.6
PFC	362.4	0.3	16,193	24,183	67.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
IIFL	570.8	2.4	9,762	32,790	29.8
SAMMAANCAP	156.8	3.3	21,184	71,171	29.8
SAIL	136.9	3.5	19,266	66,846	28.8
RVNL	323.6	0.2	19,007	74,012	25.7
JSWSTEEL	1,154.4	3.8	35,183	1,38,839	25.3

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BHARTIARTL	2,126.8	-1.6	43,293	1,25,628	34.5
IIFL	570.8	2.4	3,855	11,764	32.8
TMPV	359.2	1.9	31,307	98,498	31.8
RVNL	323.6	0.2	3,962	18,384	21.6
JIOFIN	308.0	2.4	9,913	49,288	20.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SAMMAANCAP	156.8	3.3	8,059	8,129	1.0
TMPV	359.2	1.9	53,969	59,630	0.9
SIEMENS	3,318.8	4.3	6,941	7,876	0.9
JSWSTEEL	1,154.4	3.8	10,949	12,788	0.9
TECHM	1,520.4	1.7	8,462	10,061	0.8

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
JSWENERGY	487.2	2.2	7,495	5,642	1.3
TMPV	359.2	1.9	31,360	27,295	1.1
INOXWIND	136.8	1.5	4,487	4,111	1.1
HINDUNILVR	2,425.2	0.5	17,221	16,165	1.1
HAL	4,517.8	1.7	20,197	20,514	1.0

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SIEMENS	3,318.8	4.3	62,610	25,091	2.5
JSWSTEEL	1,154.4	3.8	35,183	16,096	2.2
SAMMAANCAP	156.8	3.3	21,184	12,269	1.7
NUVAMA	7,313.0	4.9	17,500	10,146	1.7
NCC	175.8	1.5	9,567	5,674	1.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SIEMENS	3,318.8	4.3	20,775	11,520	1.8
SAMMAANCAP	156.8	3.3	12,477	6,955	1.8
JSWSTEEL	1,154.4	3.8	12,249	7,691	1.6
HINDUNILVR	2,425.2	0.5	18,208	11,713	1.6
TATAPOWER	391.5	3.0	18,692	12,528	1.5

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	885594	3.7%	2315	2400	478641	3.7%	JIOFIN	310	6182850	0.6%	308	300	5231100	-2.6%
ADANIPTS	1500	1113400	-0.4%	1506	1500	879225	-0.4%	JSWSTEEL	1200	1597725	4.0%	1154	1100	485325	-4.7%
APOLLOHOSP	7500	184375	1.4%	7393	7500	118375	1.4%	KOTAKBANK	2200	1377600	4.6%	2104	2100	1112000	-0.2%
ASIANPAINT	2900	518000	0.9%	2874	2600	361000	-9.5%	LT	4400	312900	8.3%	4062	4000	320950	-1.5%
AXISBANK	1300	1185000	0.8%	1290	1280	925625	-0.8%	M&M	3800	577400	3.1%	3686	3700	380200	0.4%
BAJAJ-AUTO	10000	200175	9.1%	9164	9000	143400	-1.8%	MARUTI	16500	117900	2.1%	16156	15000	196100	-7.2%
BAJAJFINSV	2100	406750	0.7%	2085	2000	238250	-4.1%	MAXHEALTH	1200	434700	3.2%	1163	1160	424200	-0.2%
BAJFINANCE	1100	2032500	8.8%	1011	1000	2271000	-1.1%	NESTLEIND	1320	513500	3.4%	1277	1180	208500	-7.6%
BEL	420	5377950	1.1%	415	410	3501225	-1.3%	NTPC	330	2973000	1.2%	326	330	1909500	1.2%
BHARTIARTL	2200	1665350	3.4%	2127	2100	1299600	-1.3%	ONGC	250	2931750	0.9%	248	250	2112750	0.9%
CIPLA	1600	367125	5.0%	1524	1380	348000	-9.4%	POWERGRID	280	2517500	1.8%	275	250	2287600	-9.1%
COALINDIA	390	1867050	3.4%	377	375	1775250	-0.6%	RELIANCE	1600	2834500	1.9%	1570	1500	2335500	-4.5%
DRREDDY	1300	362500	4.2%	1248	1200	303750	-3.8%	SBILIFE	2240	228375	10.4%	2029	1840	232500	-9.3%
EICHERMOT	7300	248675	1.4%	7199	6300	206500	-12.5%	SBIN	1000	4769250	1.6%	984	980	2652000	-0.4%
ETERNAL	310	7107675	1.0%	307	300	4440175	-2.2%	SHRIRAMFIN	880	2404050	2.7%	857	800	1103025	-6.6%
GRASIM	2800	435500	2.0%	2744	2700	567000	-1.6%	SUNPHARMA	1800	294000	-0.3%	1805	1780	178500	-1.4%
HCLTECH	1800	506450	11.3%	1618	1600	347900	-1.1%	TATACONSUM	1200	789250	1.2%	1185	1180	205150	-0.4%
HDFCBANK	1000	3728450	-0.4%	1004	1000	2730750	-0.4%	TMPV	400	8093600	11.3%	359	360	4297600	0.2%
HDFCLIFE	800	1208900	1.6%	788	700	741400	-11.1%	TATASTEEL	175	21675500	3.1%	170	170	13123000	0.2%
HINDALCO	800	3901800	-0.1%	801	800	1346800	-0.1%	TCS	3200	1131550	1.2%	3163	3200	632625	1.2%
HINDUNILVR	2500	1719000	3.1%	2425	2400	769500	-1.0%	TECHM	1600	1008600	5.2%	1520	1500	813600	-1.3%
ICICIBANK	1400	3661000	1.8%	1375	1400	2776900	1.8%	TITAN	4000	235025	2.6%	3898	3900	139125	0.1%
INDIGO	6000	306900	1.5%	5913	5500	177300	-7.0%	TRENT	4400	406200	2.5%	4292	4300	307400	0.2%
INFY	1600	2623600	2.7%	1558	1500	1663600	-3.7%	ULTRACEMCO	12000	76700	2.0%	11759	11700	46350	-0.5%
ITC	410	7006400	1.9%	402	410	3592000	1.9%	WIPRO	260	5565000	3.9%	250	250	3486000	-0.1%

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

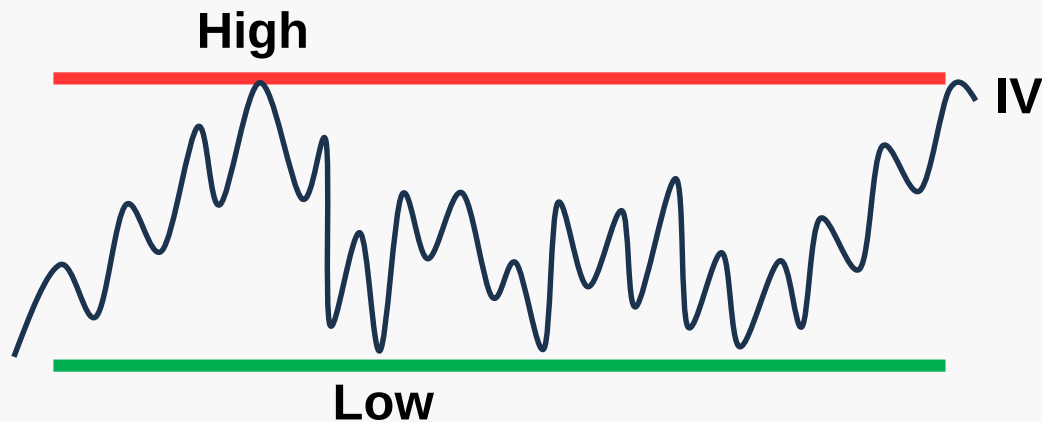
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

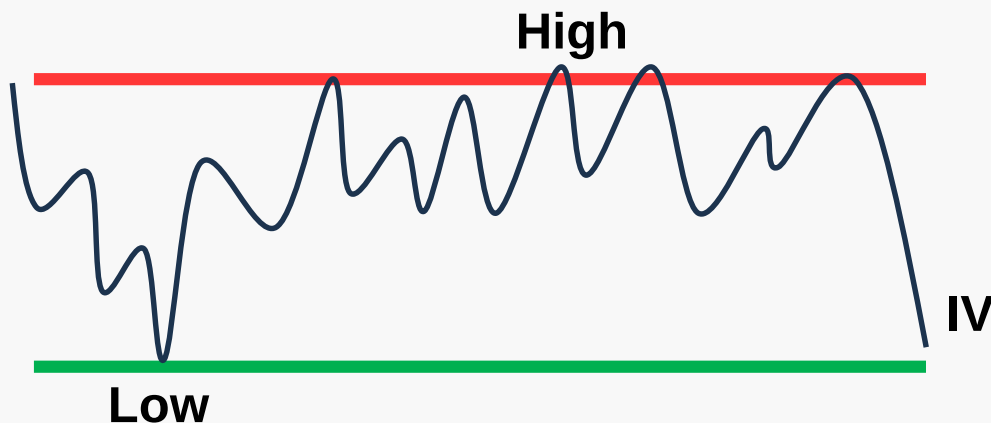
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

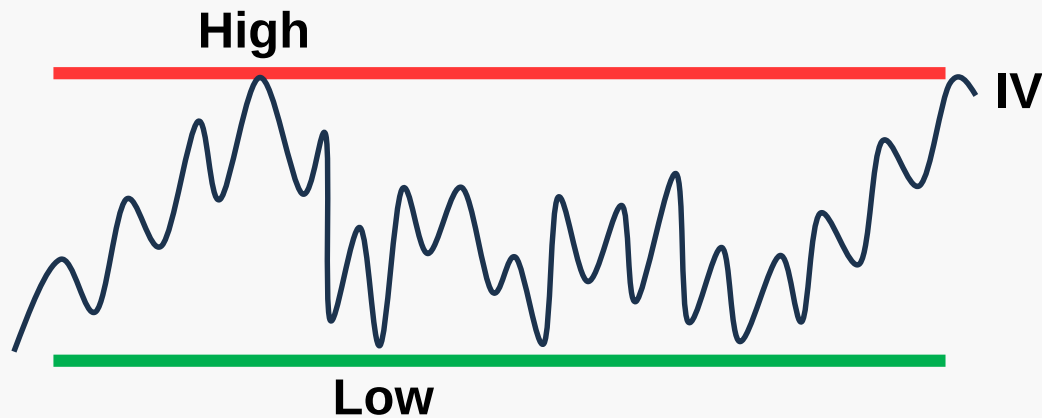


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

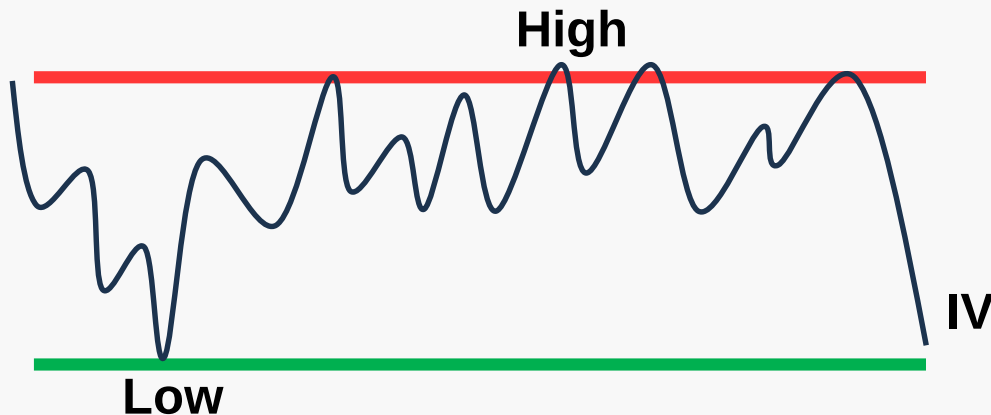


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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