



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,957	0.4% ▼
Open Interest (OI)	1,77,90,095	6.8% ▲
Change in OI (abs)	1,77,90,095	11,39,635 ▲
Premium / Discount (Abs)	15	3 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,947	0.2% ▼
Open interest (OI)	16,18,425	4.4% ▼
Change in OI (abs)	16,18,425	73,520 ▼
Premium / Discount (Abs)	15	40 ▼
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	9.72	0.57 ▲
Nifty ATM IV (%)	8.92	3.07 ▲
Bank Nifty ATM IV (%)	9.54	3.02 ▲
PCR (Nifty)	0.68	0.08 ▼
PCR (Bank Nifty)	0.75	0.01 ▲

The FII Long Ratio in Index Futures **jump** to 13.6 %, **up** from 11.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HUDCO	4,26,21,225	13.5%	226.78	2.1%
COFORGE	1,64,88,375	8.5%	1685.7	0.5%
HINDUNILVR	1,28,91,900	4.1%	2292.2	0.2%
SAIL	18,94,38,200	3.4%	134.28	1.4%
JINDALSTEL	1,44,30,625	3.1%	991.8	0.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BLUESTARCO	26,87,425	15.1%	1733.9	-1.9%
DIXON	30,81,050	14.3%	11848	-4.1%
POLYCAB	26,55,375	9.8%	7493.5	-1.0%
AMBER	11,34,300	5.7%	6514.5	-1.9%
POWERGRID	9,34,64,800	5.3%	260.85	-1.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TITAGARH	21,78,625	-29.2%	910.75	1.1%
NCC	1,14,23,700	-23.6%	160.02	1.3%
HFCL	6,14,16,900	-15.9%	64.92	5.7%
KEI	11,80,025	-9.3%	4394.2	0.4%
FEDERALBNK	6,62,75,000	-9.2%	262.75	0.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CYIENT	10,28,925	-42.2%	1103.8	-1.4%
360ONE	23,24,000	-6.0%	1172.1	-0.9%
OFSS	14,54,325	-4.7%	7683.5	-1.2%
EICHERMOT	32,93,350	-4.5%	7255	-0.9%
MANKIND	23,34,150	-4.1%	2178.1	-0.6%

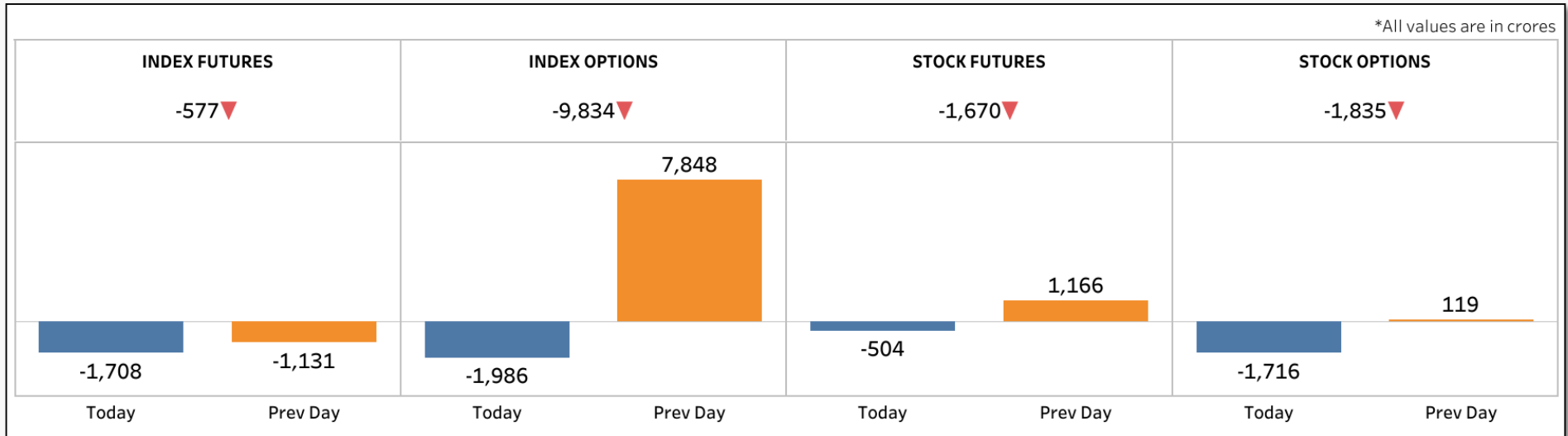
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

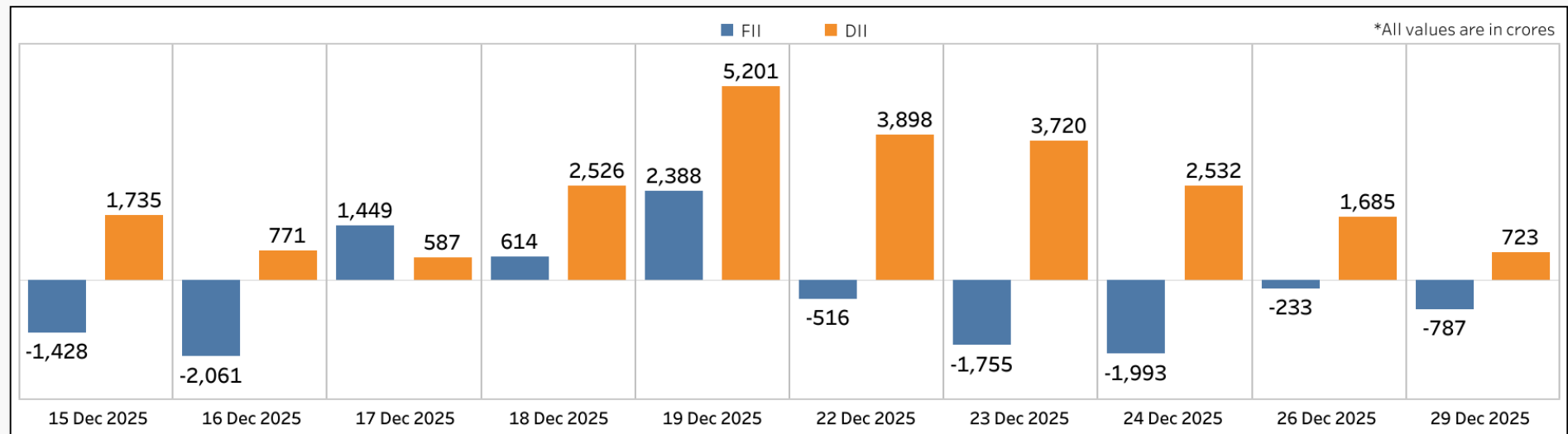
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
6,523 ▲	-5,685 ▼	-52,960 ▼	-27,348 ▼	-1,000 ▼	658 ▲	4,054 ▲	15,470 ▲
		52,078		0	3,732	4,015	36
			18,763	1,000	3,074	-39	
-5,008	-11,531	-882	-8,585				-15,434
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-18,961	-154,940	274,013	1,479,427	6,847	40,349	26,005	-4,560,313
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
-54,631 ▼	-7,444 ▼	157,842 ▲	15,268 ▲	49,106 ▲	12,471 ▲	-108,935 ▼	-3,390 ▼
77,112		33,729				72,073	
22,481	9,221		11,326		2,834		613
	16,665		-3,942	-17,474	-9,637	-36,862	-2,777
		-124,113		-66,580			
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
149,610	107,928	-481,087	2,642,566	-137,496	6,663	181,069	438,320
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

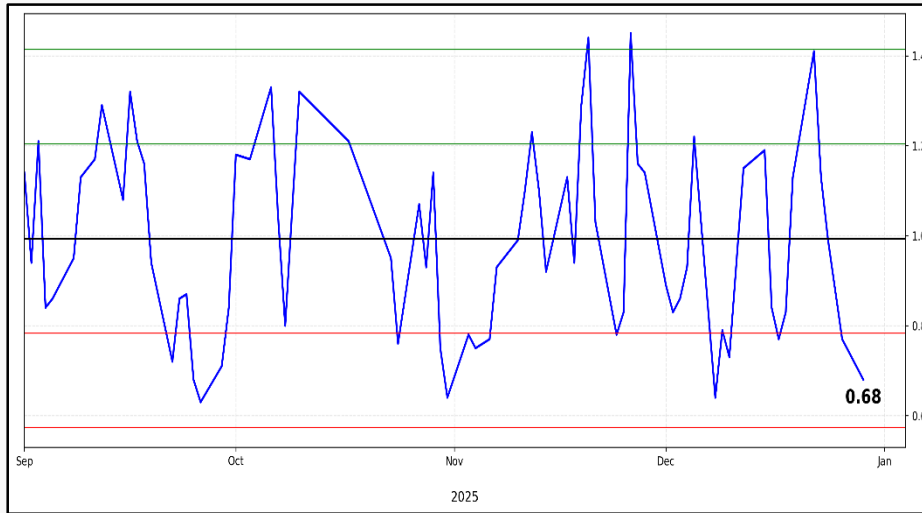
Daily Net Open Interest Change



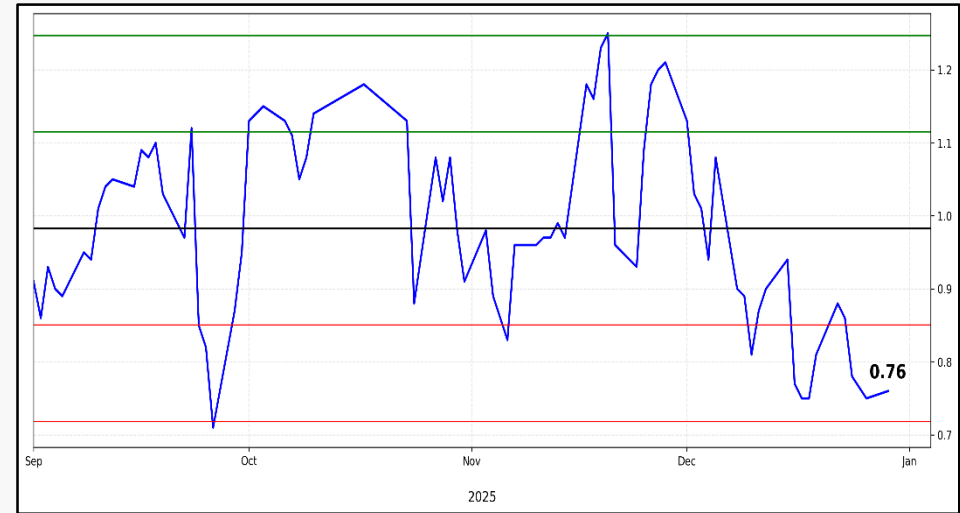
DII and FII Daily Cash Market Flows



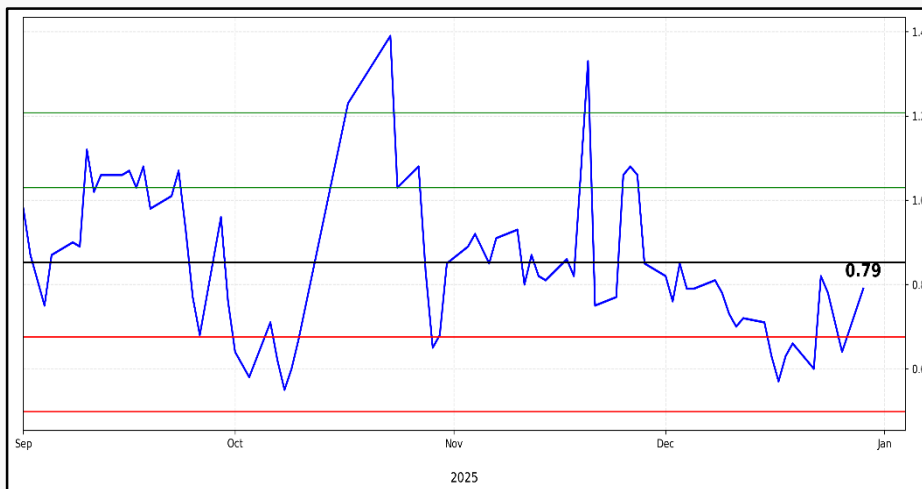
Nifty



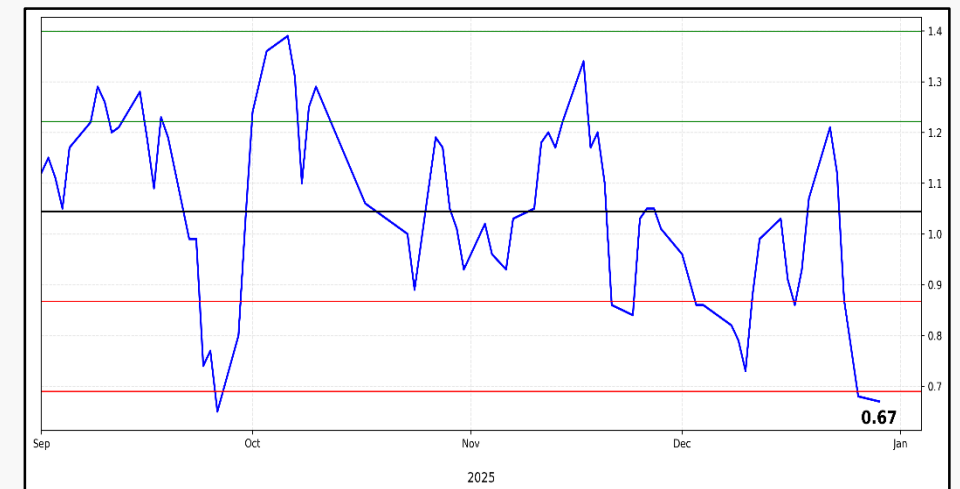
Bank Nifty



Fin Nifty

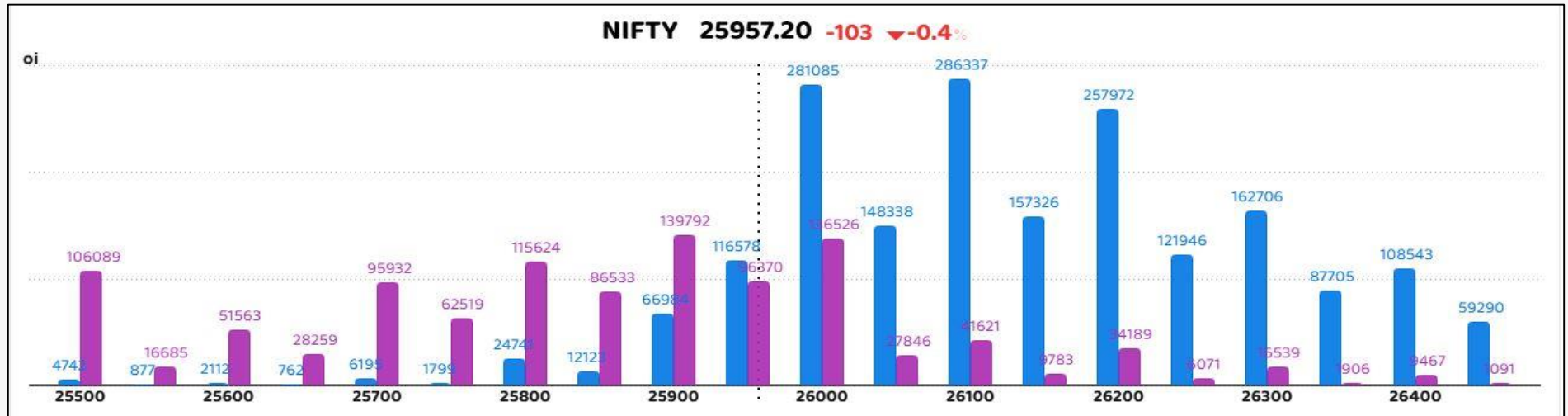


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,100 Call and 25,900 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 59,000 Call and the 59,000 Put saw the most amount of open interest.

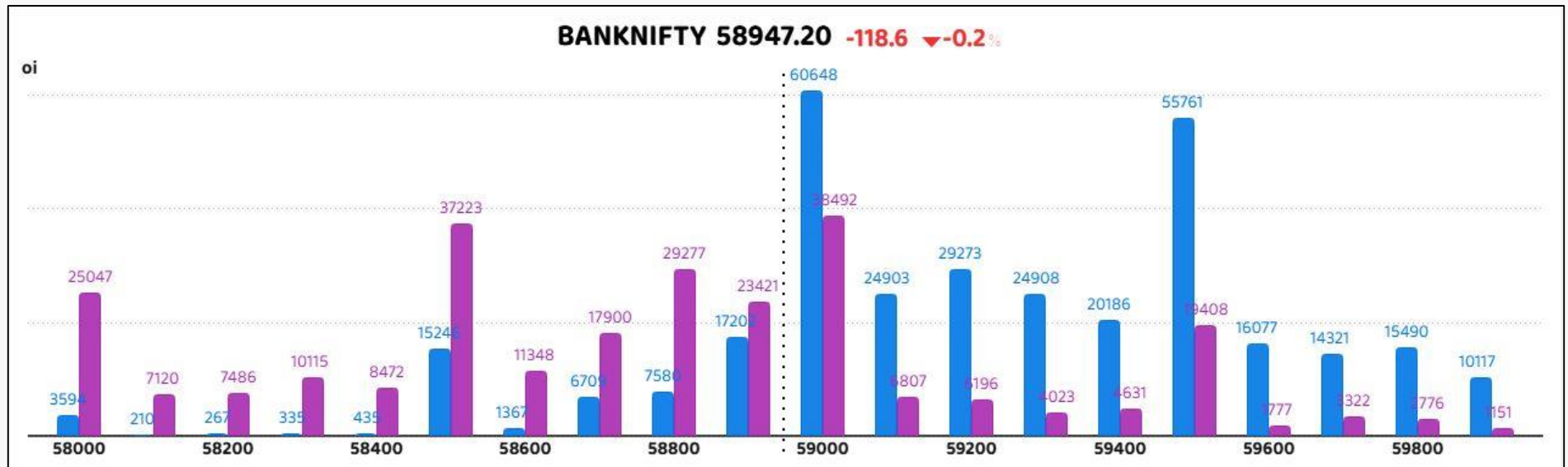
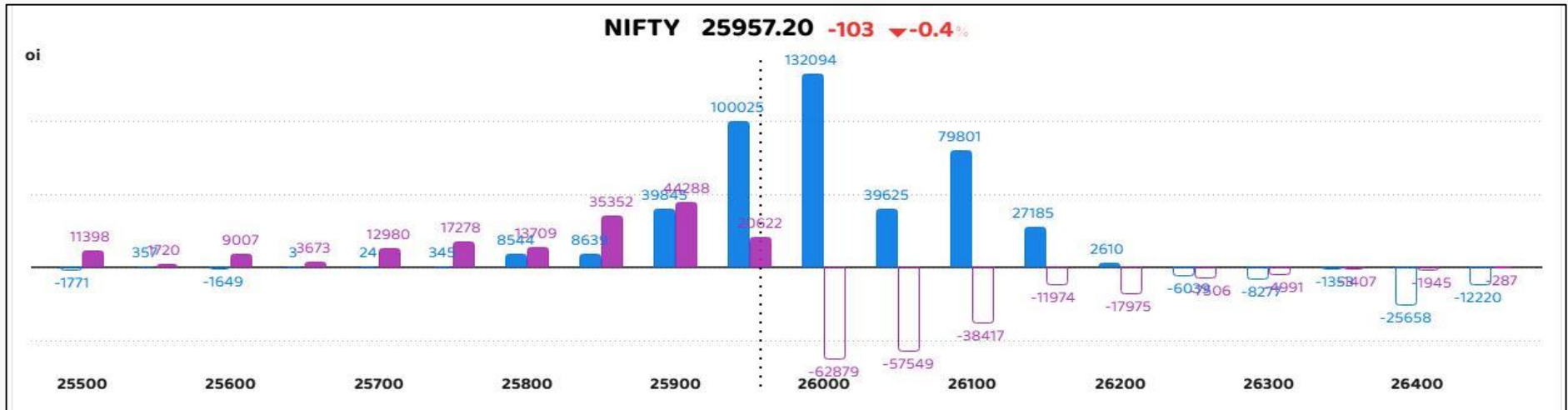


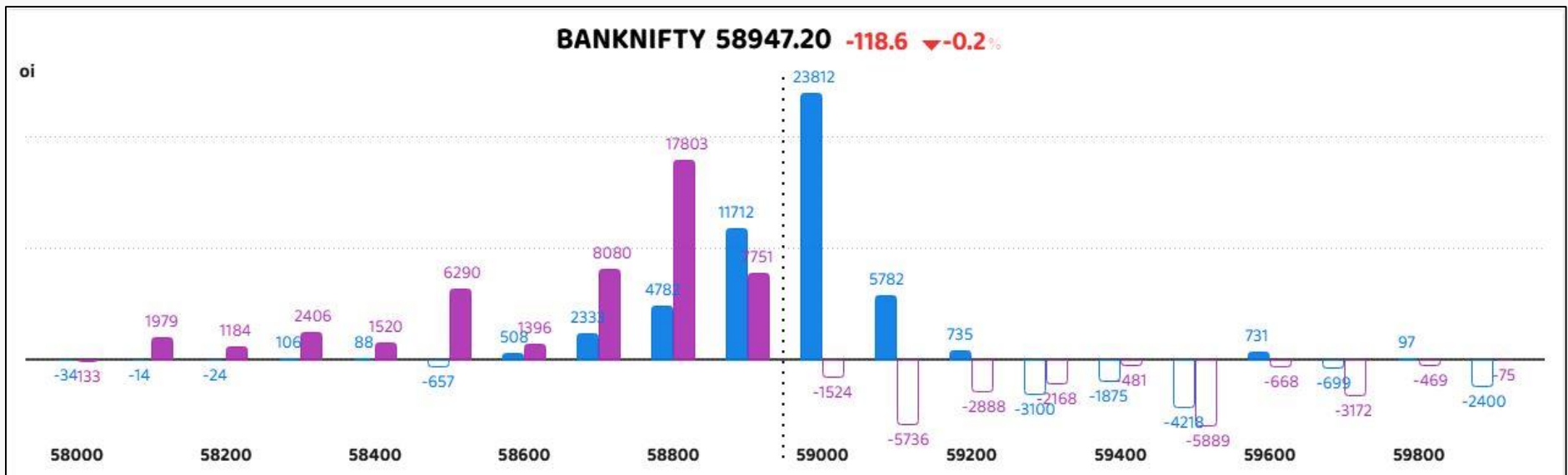
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



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



For the Bank Nifty, the biggest open interest changes were seen at the 59,000 Call & the 58,800 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	11,857.0	-3.8	45.3	53.1	9.2	82.2
HINDUSTAN UNILEV	2,293.3	0.3	16.7	25.8	0.8	63.6
KOTAK MAHINDRA	2,158.6	-0.3	18.7	32.4	1.1	56.3
BHARAT HEAVY ELE	279.4	-0.7	32.5	54.7	5.2	55.1
TATA CONSUMER PR	1,195.2	1.7	21.1	34.4	5.2	54.4

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
EICHER MOTORS	7,272.0	-0.7	7.6	36.9	7.6	0.0
GAIL INDIA LTD	170.4	-0.4	20.0	91.4	19.4	0.8
TATA POWER CO	376.2	-0.9	18.4	48.7	18.0	1.3
NTPC LTD	325.5	0.4	16.4	116.6	14.9	1.5
BANK OF BARODA	287.6	-0.2	19.6	41.2	19.3	1.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	367.6	-5.2	52.8	52.8	21.0	100.0
HFCL LTD	64.9	5.5	59.3	89.4	32.2	98.5
HINDUSTAN ZINC	618.6	-2.9	44.8	54.2	21.8	97.1
KAYNES TECHNOLOG	3,988.0	-1.8	44.9	62.9	30.3	89.4
DIXON TECHNOLOGI	11,857.0	-3.8	45.3	53.1	9.2	87.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
EICHER MOTORS	7,272.0	-0.7	7.6	36.9	7.6	0.0
TATA POWER CO	376.2	-0.9	18.4	48.7	18.0	0.7
BANK OF BARODA	287.6	-0.2	19.6	41.2	19.3	0.7
BHARAT FORGE CO	1,445.7	0.1	23.5	47.8	22.2	1.1
MAX HEALTHCARE I	1,064.1	-0.9	24.5	68.8	23.8	1.1

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
NESTLEIND	1,280.0	0.6	25,146	4,881	5.2
JSWSTEEL	1,092.6	-0.2	49,642	11,440	4.3
MARICO	753.1	1.3	12,579	2,931	4.3
TATACONSUM	1,195.2	1.7	33,147	7,772	4.3
HUDCO	226.8	2.3	35,266	8,978	3.9

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ABB	5,165.0	-0.3	6,428	11,670	1.8
CHOLAFIN	1,698.8	0.0	14,740	25,660	1.7
MANKIND	2,182.0	-0.5	3,109	4,983	1.6
PNB	120.5	0.1	20,901	27,027	1.3
360ONE	1,170.6	-0.7	2,563	3,253	1.3

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
DIXON	11,857.0	-3.8	1,08,924	1,08,171	100.0
RVNL	367.6	-5.2	36,276	26,553	100.0
VEDL	593.1	-1.3	58,019	55,759	100.0
NBCC	122.1	0.0	9,555	9,578	99.8
HINDZINC	618.6	-2.9	48,531	49,897	97.3

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
HINDZINC	618.6	-2.9	34,254	33,668	100.0
HUDCO	226.8	2.3	7,410	7,306	100.0
MAZDOCK	2,537.3	-0.2	13,968	12,494	100.0
NBCC	122.1	0.0	5,630	5,092	100.0
CONCOR	520.0	-0.1	9,209	9,261	99.4

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
HFCL	64.8	5.5	57,927	43,902	100.0
SAIL	134.1	1.3	68,695	66,846	100.0
HINDZINC	618.6	-2.9	2,62,352	2,84,880	92.1
VEDL	593.1	-1.3	2,05,918	2,37,057	86.9
DIXON	11,857.0	-3.8	5,20,494	6,00,370	86.7

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
DIXON	11,857.0	-3.8	5,27,742	3,64,061	100.0
HINDZINC	618.6	-2.9	1,96,817	94,741	100.0
IRFC	126.4	-5.5	71,875	73,042	98.4
NBCC	122.1	0.0	12,551	15,569	80.6
RVNL	367.6	-5.2	1,06,235	1,34,027	79.3

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
IRFC	126.4	-5.5	25,271	9,699	2.6
RVNL	367.6	-5.2	36,276	14,151	2.6
COALINDIA	400.6	-0.4	34,147	16,124	2.1
COFORGE	1,683.3	0.6	44,315	21,009	2.1
IRCTC	699.2	-0.9	22,604	11,792	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
IRFC	126.4	-5.5	12,537	5,411	2.3
RVNL	367.6	-5.2	17,136	8,016	2.1
COFORGE	1,683.3	0.6	22,085	10,498	2.1
CHOLAFIN	1,698.8	0.0	20,477	9,878	2.1
MANAPPURAM	310.5	-0.9	6,924	3,918	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SAIL	134.1	1.3	68,695	8,381	8.2
HFCL	64.8	5.5	57,927	7,194	8.1
COFORGE	1,683.3	0.6	2,37,330	36,842	6.4
TATACONSUM	1,195.2	1.7	33,147	6,096	5.4
MAZDOCK	2,537.3	-0.2	2,08,925	44,529	4.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
IRFC	126.4	-5.5	71,875	8,381	8.6
RVNL	367.6	-5.2	1,06,235	13,037	8.1
TITAGARH	907.6	1.1	27,802	4,131	6.7
HFCL	64.8	5.5	18,699	2,785	6.7
COFORGE	1,683.3	0.6	1,28,635	21,616	6.0

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	1832679	8.9%	2203	2100	375744	-4.7%	JIOFIN	305	8227350	3.8%	294	300	2561500	2.1%
ADANIPTS	1520	1387950	4.5%	1454	1500	380000	3.1%	JSWSTEEL	1200	2075625	9.8%	1093	1000	963225	-8.5%
APOLLOHOSP	8000	137500	12.9%	7085	7000	101750	-1.2%	KOTAKBANK	2200	1246400	1.9%	2159	2000	715600	-7.3%
ASIANPAINT	3000	686750	8.1%	2775	2600	429250	-6.3%	LT	4100	629475	1.5%	4039	4000	294350	-1.0%
AXISBANK	1290	3572500	4.7%	1232	1160	948750	-5.8%	M&M	3800	603600	5.8%	3592	3500	189000	-2.6%
BAJAJ-AUTO	9300	222150	2.3%	9087	9000	79875	-1.0%	MARUTI	17000	151400	2.8%	16542	15000	153700	-9.3%
BAJAJFINSV	2100	756500	4.4%	2012	1880	363250	-6.6%	MAXHEALTH	1100	541800	3.4%	1064	1040	480900	-2.3%
BAJFINANCE	1050	2264250	5.2%	998	960	1026750	-3.8%	NESTLEIND	1320	1373500	3.1%	1280	1250	189500	-2.3%
BEL	410	6975375	4.3%	393	390	2064825	-0.8%	NTPC	330	5250000	1.4%	326	295	1621500	-9.4%
BHARTIARTL	2160	1817825	3.8%	2082	2000	530575	-3.9%	ONGC	250	8588250	6.5%	235	250	1345500	6.5%
CIPLA	1660	816375	11.1%	1494	1400	484875	-6.3%	POWERGRID	280	4193300	7.4%	261	260	1930400	-0.2%
COALINDIA	410	2473200	2.3%	401	400	1386450	-0.2%	RELIANCE	1600	7830000	3.5%	1546	1500	1764000	-3.0%
DRREDDY	1300	1690625	2.5%	1269	1140	372500	-10.1%	SBILIFE	2040	863250	1.5%	2010	1840	265125	-8.4%
EICHERMOT	8000	129150	10.0%	7272	6300	235725	-13.4%	SBIN	1000	5223750	3.6%	965	950	1668750	-1.6%
ETERNAL	310	8131025	9.6%	283	285	2965775	0.8%	SHRIRAMFIN	1000	2029500	4.7%	956	900	1187175	-5.8%
GRASIM	3000	313500	5.5%	2842	2700	297000	-5.0%	SUNPHARMA	1840	1948450	7.2%	1717	1660	211400	-3.3%
HCLTECH	1720	1085000	5.5%	1631	1440	503300	-11.7%	TATACONSUM	1200	1489950	0.4%	1195	1070	347050	-10.5%
HDFCBANK	1000	3443550	0.8%	992	980	1189100	-1.2%	TMPV	370	7442400	3.2%	359	350	5461600	-2.4%
HDFCLIFE	800	2228600	7.2%	746	700	1337600	-6.2%	TATASTEEL	175	17473500	1.6%	172	170	10560000	-1.3%
HINDALCO	880	1113700	1.7%	865	800	754600	-7.5%	TCS	3300	784000	1.5%	3252	3200	404600	-1.6%
HINDUNILVR	2300	680400	0.3%	2293	2200	191100	-4.1%	TECHM	1600	699600	-0.8%	1612	1600	347400	-0.8%
ICICIBANK	1400	4335800	4.2%	1343	1400	1792700	4.2%	TITAN	3900	329000	-2.1%	3984	3900	285250	-2.1%
INDIGO	5500	1509750	8.2%	5086	5000	820350	-1.7%	TRENT	4400	659000	4.1%	4226	4000	230900	-5.3%
INFY	1600	7438800	-2.7%	1645	1600	4474000	-2.7%	ULTRACEMCO	12000	101700	1.7%	11799	10800	85200	-8.5%
ITC	410	7934400	1.8%	403	400	2308800	-0.6%	WIPRO	285	5127000	7.9%	264	260	2301000	-1.6%

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

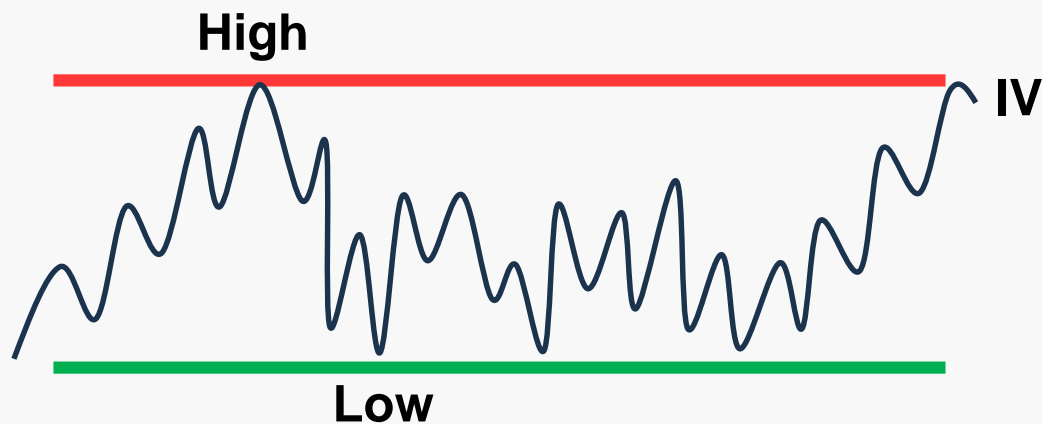
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

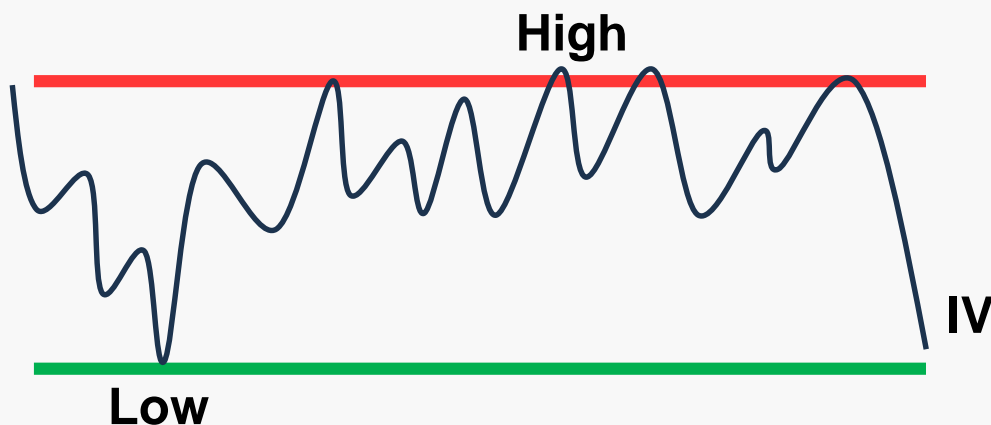
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DIIIs), 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

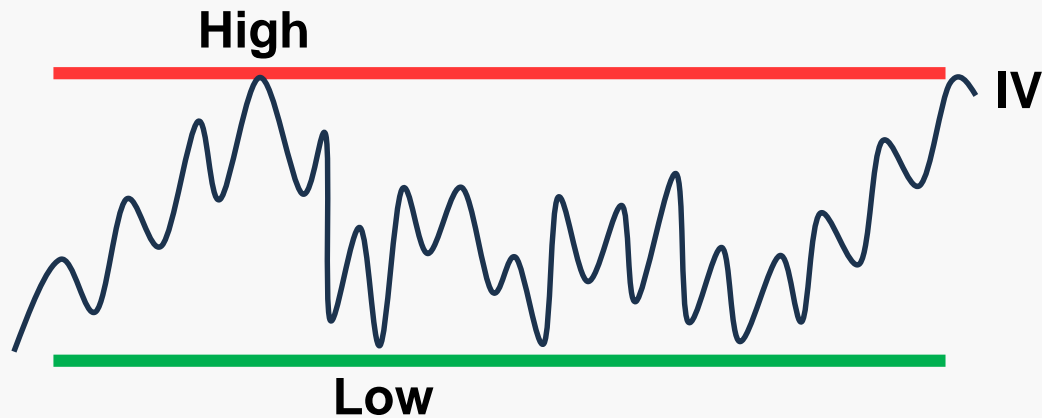


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

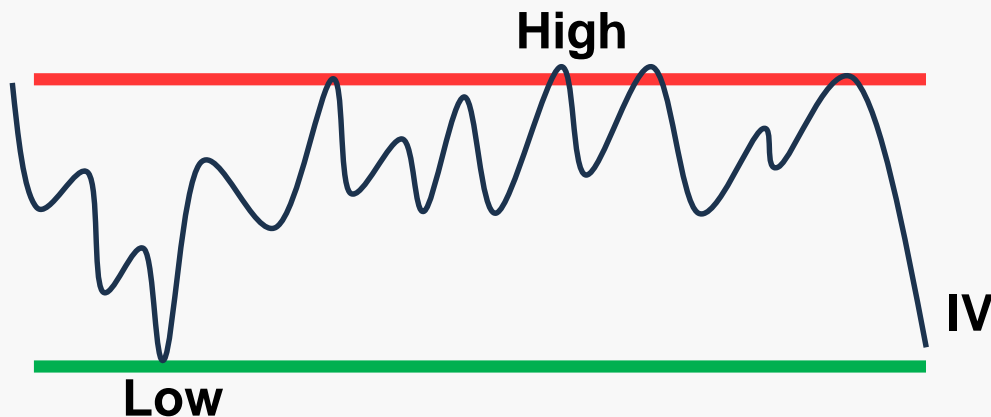


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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