



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,060	0.4%▲
Open Interest (OI)	2,03,92,960	0.4%▼
Change in OI (abs)	2,03,92,960	80,280▼
Premium / Discount (Abs)	46	5▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,027	0.7%▲
Open interest (OI)	20,19,270	4.8%▲
Change in OI (abs)	20,29,270	92,190▲
Premium / Discount (Abs)	127	62▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.79	0.15▼
Nifty ATM IV (%)	10.97	0.3▲
Bank Nifty ATM IV (%)	11.85	0.6▲
PCR (Nifty)	1.13	0.21▲
PCR (Bank Nifty)	1.18	0.21▲

The FII Long Ratio in Index Futures **Jump** to 12 %, **UP** from 11 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	36,56,500	16.6%	2854.9	3.7%
PGEL	1,01,85,100	6.7%	582.55	0.4%
CAMS	17,68,350	6.3%	3977.2	0.9%
INDIANB	1,21,56,000	6.2%	891.4	2.3%
CDSL	96,40,125	6.0%	1637.1	0.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TMPV	8,18,20,000	31.3%	372.4	-5.2%
GLENMARK	1,50,18,000	27.7%	1876	-1.4%
INOXWIND	8,00,34,885	13.7%	146.61	-1.8%
ASTRAL	90,08,725	9.5%	1470.8	-3.0%
ZYDUSLIFE	1,14,63,300	9.5%	935.25	-1.1%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TORNTPOWER	33,95,600	-9.1%	1312.3	0.4%
HUDCO	3,41,32,500	-9.1%	239.09	5.3%
EICHERMOT	32,88,975	-5.3%	6809.5	1.4%
CANBK	17,39,74,500	-5.2%	149.18	1.8%
EXIDEIND	3,69,36,000	-3.7%	383.7	0.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KPITTECH	33,12,025	-2.1%	1219.8	-0.5%
TORNTPHARM	22,33,750	-1.9%	3828.5	-0.5%
MOTHERSON	17,96,23,050	-1.1%	110.14	-0.1%
ALKEM	17,69,625	-1.1%	5724	-0.3%
SAIL	18,69,23,700	-0.8%	141.63	-0.3%

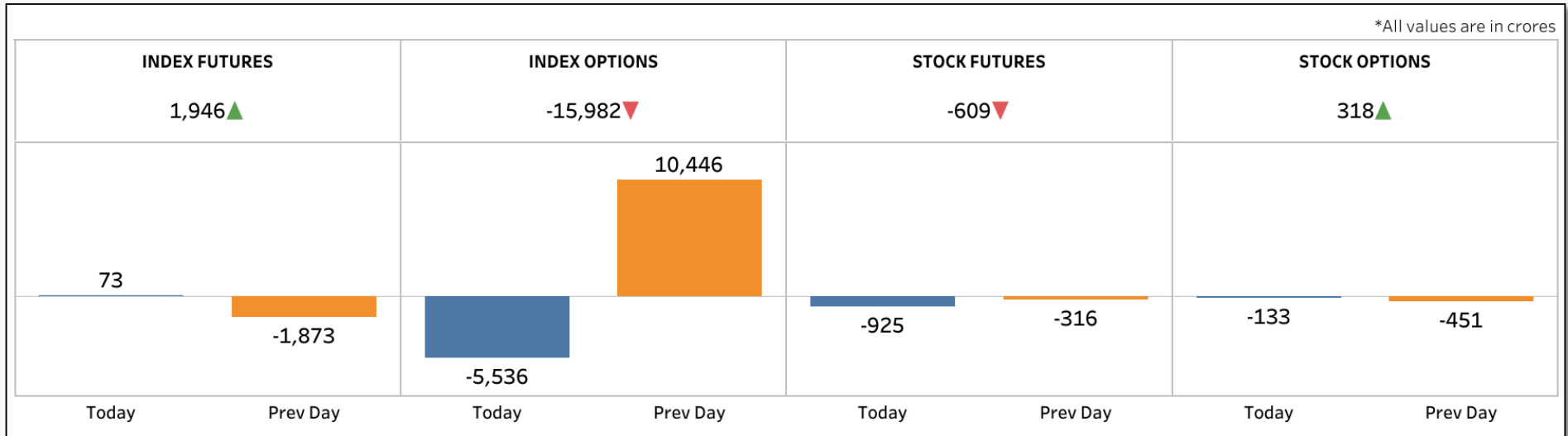
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

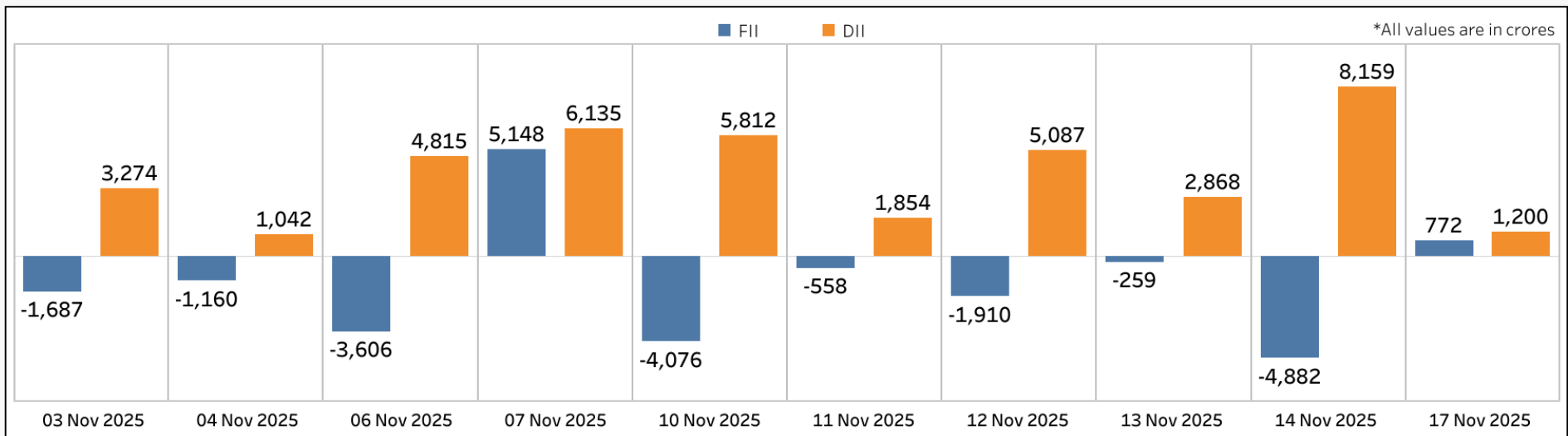
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
6,198 ▲	10,006 ▲	-82,531 ▼	-11,424 ▼	0	-4,410 ▼	14,700 ▲	10,044 ▲
11,233	5,035	46,803		0	4,085	0	
334				-325			
	-9,672						
		-35,728	-19,074			-14,700	-11,827
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
31,435	-169,285	230,962	1,297,611	2,381	53,680	24,427	-4,467,556
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
94,409 ▲	-9,251 ▼	302,383 ▲	-1,254 ▼	-100,606 ▼	3,655 ▲	-234,553 ▼	2,634 ▲
2,953	9,130	140,036	25,695	86,420	112	130,244	
			26,949				
-91,456	-121			-14,186	-3,543		-4,838
		-162,347				-104,309	-7,472
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-38,972	105,928	-284,172	2,638,860	5,156	9,677	28,783	531,085
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

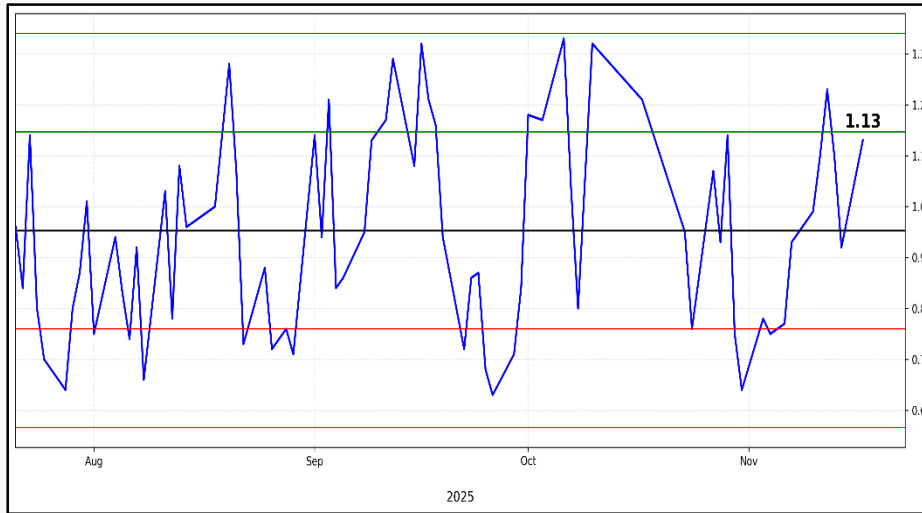
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



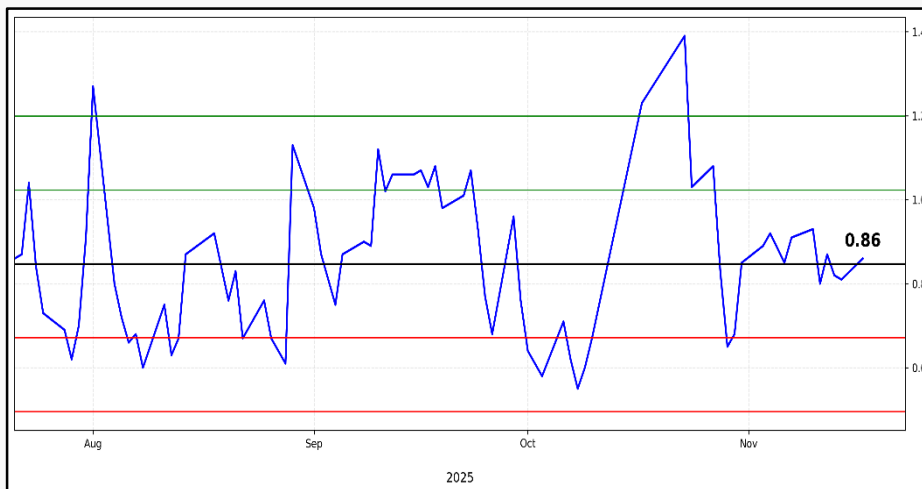
Nifty



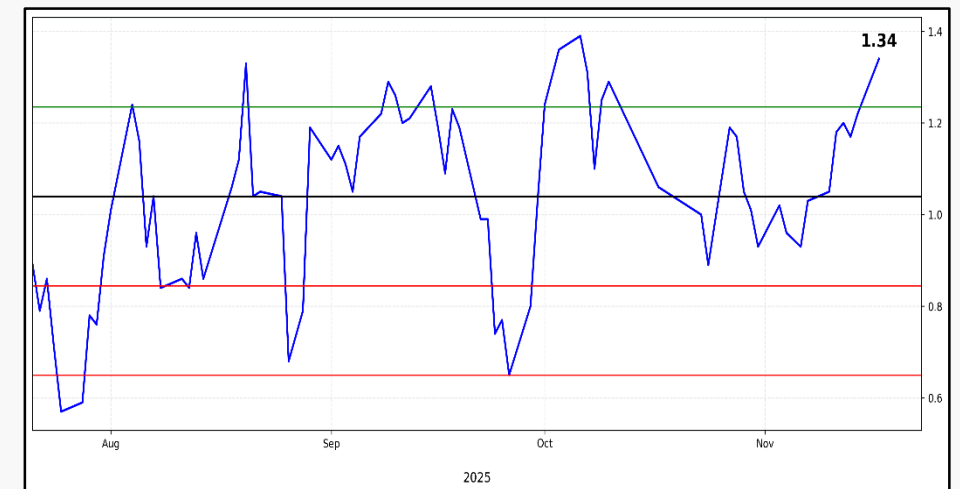
Bank Nifty



Fin Nifty

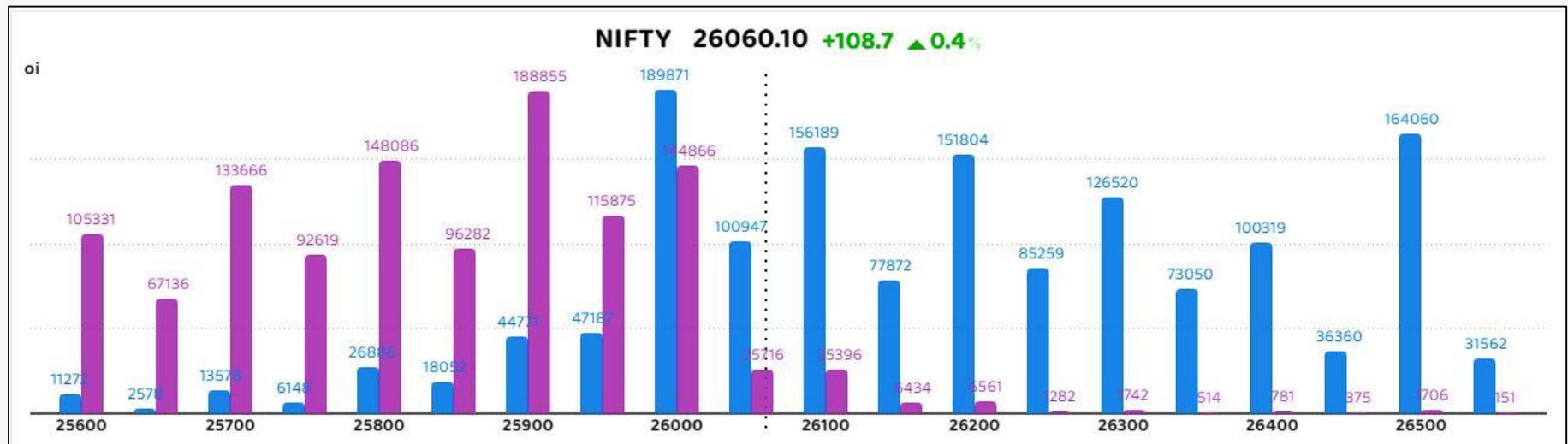


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 25,800 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,500 Call and the 58,500 Put saw the most amount of open interest.

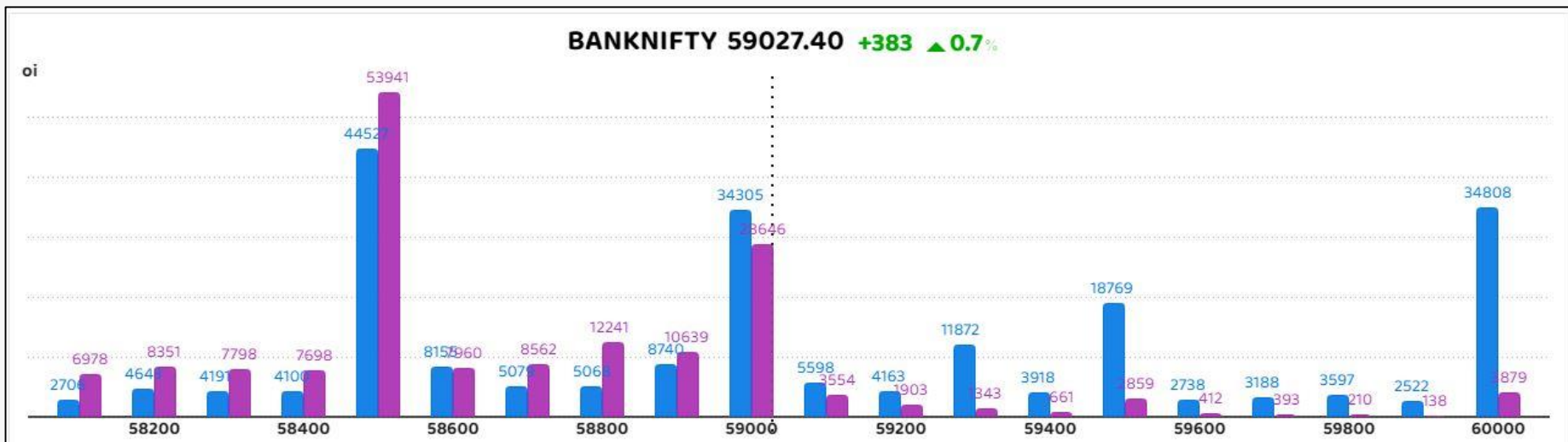
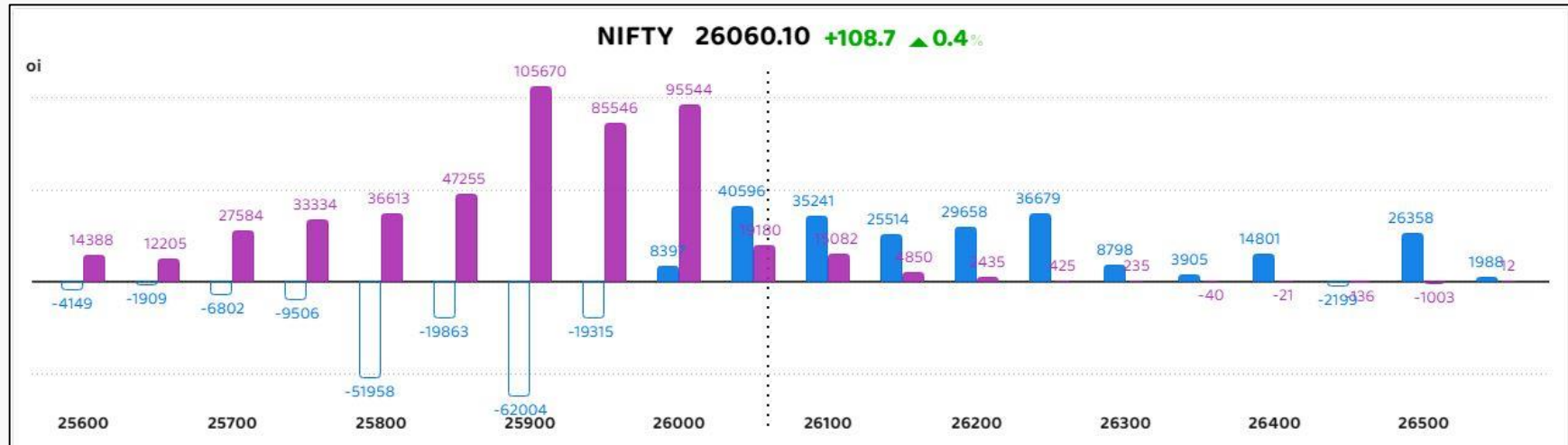


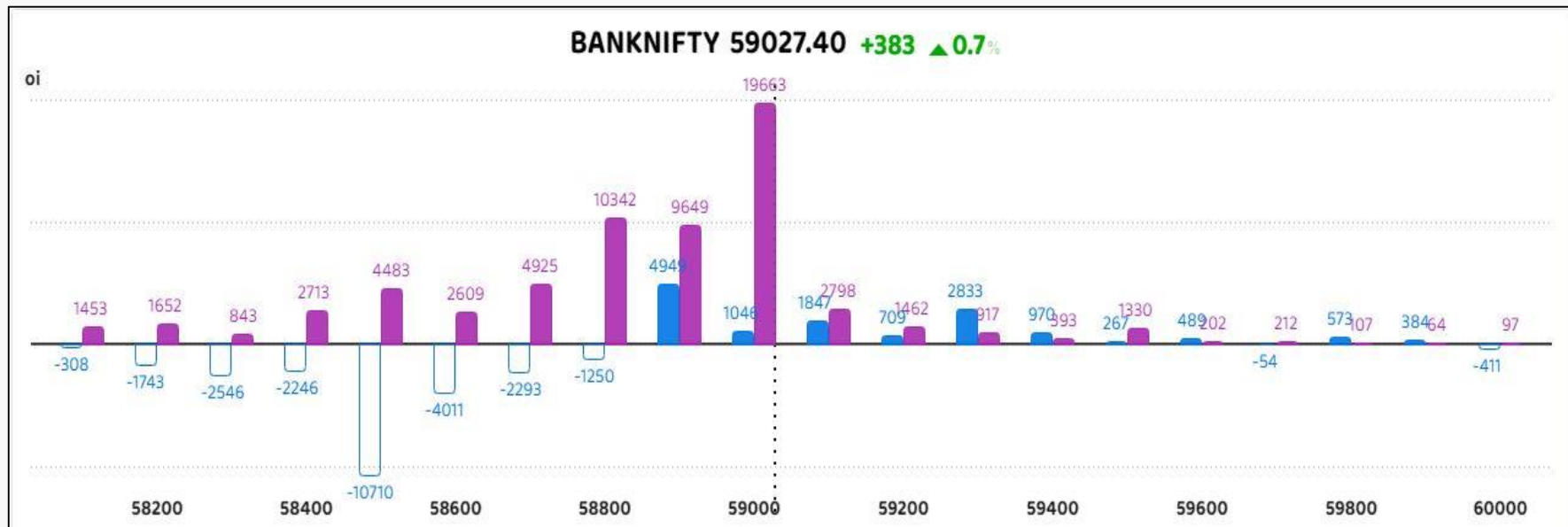
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,900 Call and the 25,900 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,500 Call & the 59,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CHOLAMANDALAM IN	1699.7	-0.9	41.4	47.2	20.3	78.4
BOSCH LTD	37450.0	1.3	23.1	36.2	2.1	61.6
HDFC BANK LTD	996.6	0.7	16.2	28.0	1.5	55.4
TATA CONSUMER PR	1178.9	1.8	21.4	34.4	5.5	54.9
ICICI LOMBARD GE	2042.9	1.9	21.8	38.2	3.2	53.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN AERONA	4795.2	1.4	22.7	51.6	22.7	0.0
ABB INDIA LTD	5041.5	1.8	22.1	47.7	22.1	0.0
INTERGLOBE AVIAT	5873.0	-0.6	19.4	43.2	19.4	0.0
SHRIRAM FINANCE	817.9	1.1	15.1	49.1	15.1	0.0
INDUS TOWERS LTD	410.2	-0.5	24.5	42.7	24.5	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CHOLAMANDALAM IN	1699.7	-0.9	41.4	47.2	20.3	97.3
JSW ENERGY LTD	527.65	-0.2	43.7	52.1	24.3	78.4
NMDC LTD	76.54	0.0	34.7	55.5	20.8	66.9
FORTIS HEALTHCAR	944.1	0.7	28.0	36.0	21.3	60.1
ADANI PORTS AND	1507.6	-0.3	28.9	99.7	19.8	52.3

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN AERONA	4795.2	1.4	22.7	51.6	22.7	0.0
INTERGLOBE AVIAT	5873.0	-0.6	19.4	43.2	19.4	0.0
ABB INDIA LTD	5041.5	1.8	22.1	47.7	22.1	0.0
SHRIRAM FINANCE	817.9	1.1	15.1	49.1	15.1	0.0
BSE LTD	2811.9	-0.6	35.5	66.7	35.5	0.0

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BANDHANBNK	154.8	0.1	24,855	24,855	100.0
CROMPTON	274.4	-0.7	15,200	15,200	100.0
DELHIVERY	440.1	0.8	15,196	15,196	100.0
INDIANB	890.2	2.5	7,010	7,010	100.0
INOXWIND	146.1	-1.7	13,067	13,067	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
AMBER	7,443.5	0.9	10,691	10,691	100.0
HINDALCO	807.2	0.4	24,770	24,770	100.0
INOXWIND	146.1	-1.7	5,293	5,293	100.0
MUTHOOTFIN	3,760.5	0.9	20,826	20,826	100.0
NMDC	76.5	0.0	13,879	13,879	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
TMPV	372.7	-4.7	2,87,427	2,87,427	100.0
INOXWIND	146.1	-1.7	37,745	40,548	93.1
MAXHEALTH	1,121.6	1.7	54,929	62,071	88.5
GLENMARK	1,868.9	-1.4	1,89,302	2,18,772	86.5
HEROMOTOCO	5,798.5	4.7	1,92,828	2,80,187	68.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
INOXWIND	146.1	-1.7	12,089	12,089	100.0
TMPV	372.7	-4.7	98,498	98,498	100.0
RVNL	327.0	1.9	16,622	18,384	90.4
MAXHEALTH	1,121.6	1.7	16,400	28,774	57.0
GLENMARK	1,868.9	-1.4	89,947	174,951	51.4

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SHREECEM	26,680.0	-0.1	7,647	2,018	3.8
GLENMARK	1,868.9	-1.4	24,175	6,611	3.7
MARICO	760.7	3.0	6,976	2,584	2.7
ALKEM	5,723.0	0.0	5,662	2,141	2.6
PIIND	3,542.6	-0.5	9,568	3,879	2.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
MUTHOOTFIN	3,760.5	0.9	20,826	5,919	3.5
MARICO	760.7	3.0	5,956	1,983	3.0
GLENMARK	1,868.9	-1.4	11,957	4,339	2.8
ASIANPAINT	2,887.9	-0.6	46,705	17,480	2.7
SIEMENS	3,232.6	4.8	9,137	3,859	2.4

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
GLENMARK	1,868.9	-1.4	1,89,302	11,394	16.6
SIEMENS	3,232.6	4.8	1,64,484	11,419	14.4
MARICO	760.7	3.0	57,652	5,933	9.7
TMPV	372.7	-4.7	2,87,427	39,638	7.3
HEROMOTOCO	5,798.5	4.7	1,92,828	28,903	6.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
GLENMARK	1,868.9	-1.4	89,947	4,243	21.2
SIEMENS	3,232.6	4.8	57,510	4,620	12.4
MARICO	760.7	3.0	23,501	2,693	8.7
RVNL	327.0	1.9	16,622	3,112	5.3
TMPV	372.7	-4.7	98,498	18,487	5.3

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	2520.65	1489380	2.4%	2462	2229.8	1090461	-9.4%	JIOFIN	320	10828800	2.6%	312	310	6963050	-0.6%
ADANIPTS	1500	1805000	-0.5%	1508	1500	972325	-0.5%	JSWSTEEL	1220	1179225	3.8%	1176	1150	566325	-2.2%
APOLLOHOSP	8000	313875	6.8%	7488	7500	124000	0.2%	KOTAKBANK	2200	2307600	4.6%	2103	2100	1397600	-0.1%
ASIANPAINT	2900	1452250	0.4%	2888	2800	1440500	-3.0%	LT	4100	916475	1.8%	4028	4000	448175	-0.7%
AXISBANK	1300	2613125	4.0%	1250	1220	1073750	-2.4%	M&M	3800	717000	1.7%	3735	3600	577600	-3.6%
BAJAJ-AUTO	9000	274650	0.6%	8946	9000	129225	0.6%	MARUTI	16500	442500	3.9%	15878	15500	164400	-2.4%
BAJAJFINSV	2100	910250	1.0%	2080	2000	561750	-3.8%	MAXHEALTH	1200	879375	7.0%	1122	1120	396375	-0.1%
BAJFINANCE	1100	5202750	7.1%	1027	1000	2270250	-2.6%	NESTLEIND	1300	2090500	2.3%	1270	1300	209000	2.3%
BEL	430	11847450	1.3%	425	420	4763775	-1.1%	NTPC	335	8290500	1.5%	330	300	2923500	-9.1%
BHARTIARTL	2100	3280350	-0.6%	2112	2000	1693850	-5.3%	ONGC	254	15903000	2.4%	248	234	2101500	-5.7%
CIPLA	1600	1839375	4.2%	1536	1500	516375	-2.3%	POWERGRID	290	7457500	6.0%	274	270	2642900	-1.3%
COALINDIA	389.75	4295700	0.5%	388	439.75	2108700	13.4%	RELIANCE	1500	5039500	-1.2%	1518	1500	3635500	-1.2%
DRREDDY	1300	2598750	4.5%	1244	1200	652500	-3.6%	SBILIFE	2020	2269875	1.2%	1996	1900	682500	-4.8%
EICHERMOT	7000	449050	3.0%	6799	6700	211400	-1.5%	SBIN	970	5003250	-0.3%	973	900	4454250	-7.5%
ETERNAL	330	14217775	6.6%	310	300	7573275	-3.1%	SHRIRAMFIN	820	2018775	0.3%	818	800	1988250	-2.2%
GRASIM	3000	1091250	7.5%	2790	2800	253500	0.3%	SUNPHARMA	1740	877450	-1.4%	1764	1660	449400	-5.9%
HCLTECH	1600	866250	-0.4%	1606	1400	905800	-12.8%	TATACONSUM	1200	1405250	1.8%	1179	1180	258500	0.1%
HDFCBANK	1000	6889850	0.3%	997	950	2743400	-4.7%	TMPV	380	9851200	2.0%	373	370	3728000	-0.7%
HDFCLIFE	820	1860100	6.5%	770	750	1006500	-2.6%	TATASTEEL	185	107129000	6.8%	173	175	15020500	1.1%
HINDALCO	800	2623600	-0.9%	807	800	2526300	-0.9%	TCS	3100	1567475	-0.1%	3102	3100	848225	-0.1%
HINDUNILVR	2500	2125800	3.1%	2425	2500	709500	3.1%	TECHM	1500	1005000	3.2%	1453	1400	421200	-3.6%
ICICIBANK	1400	7021000	1.5%	1379	1400	2647400	1.5%	TITAN	3900	605325	0.8%	3869	3700	469875	-4.4%
INDIGO	5900	521700	0.5%	5873	5800	179250	-1.2%	TRENT	4800	912200	9.0%	4405	4400	398600	-0.1%
INFY	1600	3292400	6.1%	1508	1500	2107200	-0.5%	ULTRACEMCO	12000	162050	1.9%	11778	12000	67750	1.9%
ITC	420	10452800	3.2%	407	410	3276800	0.7%	WIPRO	250	12912000	2.4%	244	240	6186000	-1.7%

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

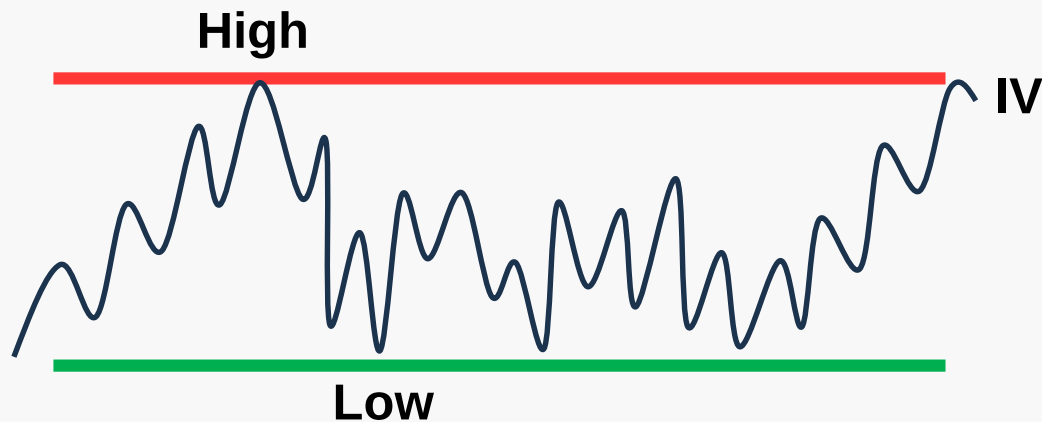
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

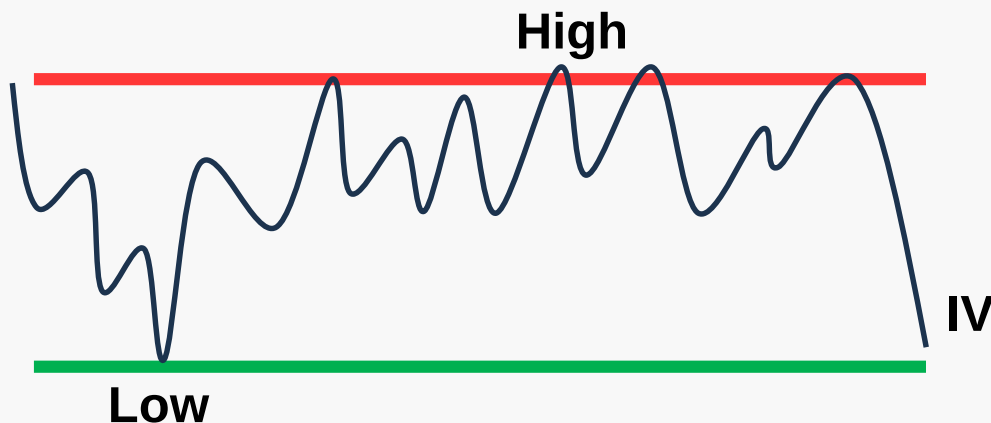
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

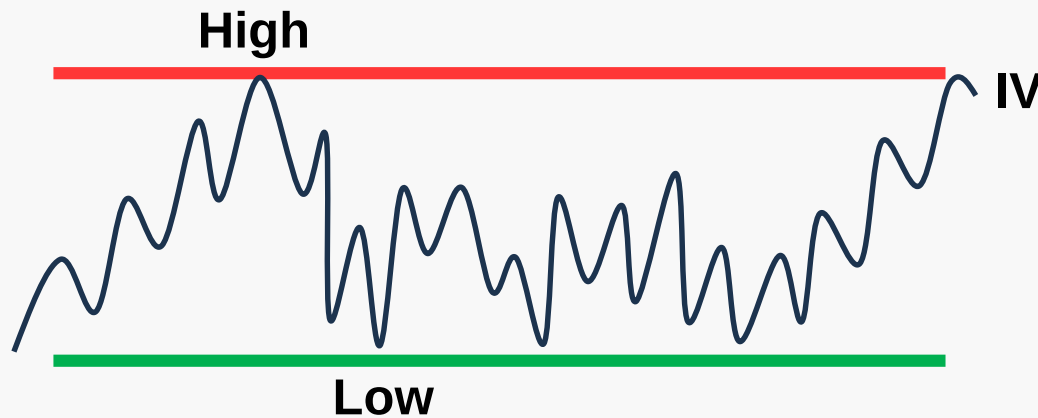


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

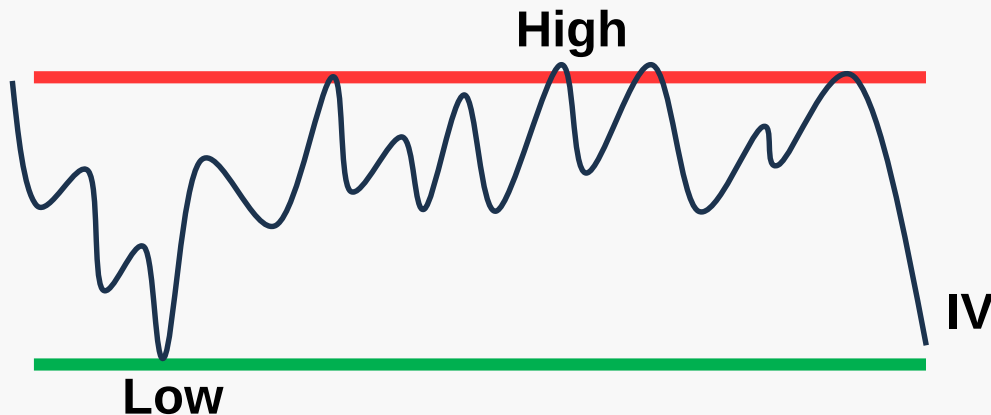


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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