



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,954	0.1% ▼
Open Interest (OI)	1,94,80,070	0.3% ▼
Change in OI (abs)	1,94,80,070	59,560 ▼
Premium / Discount (Abs)	75	36 ▼
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,535	0.0% ▲
Open interest (OI)	19,36,320	7.0% ▼
Change in OI (abs)	19,36,320	1,45,290 ▼
Premium / Discount (Abs)	153	95 ▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	12.16	0.05 ▲
Nifty ATM IV (%)	10.99	0.4 ▲
Bank Nifty ATM IV (%)	11.87	0.2 ▲
PCR (Nifty)	1.10	0.13 ▼
PCR (Bank Nifty)	0.98	0.01 ▲

The FII Long Ratio in Index Futures **Drop** to 11.2 %, **down** from 11.9 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PGEL	92,04,950	11.4%	561.75	6.0%
MOTHERSON	18,97,15,200	11.0%	109.49	2.9%
NUVAMA	3,46,950	8.4%	7406	0.3%
DELHIVERY	1,93,72,200	7.5%	435.8	0.5%
MUTHOOTFIN	32,68,375	4.6%	3397.2	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ALKEM	18,46,000	14.3%	5744	-1.0%
NBCC	9,02,85,000	11.7%	108.79	-3.0%
TATASTEEL	25,13,88,500	8.8%	176.84	-1.4%
IRCTC	1,74,36,125	8.4%	705.6	-1.4%
ETERNAL	30,19,63,425	8.0%	299.1	-3.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IGL	1,41,54,250	-11.2%	215.88	2.5%
ASHOKLEY	14,73,60,000	-8.2%	150.01	5.6%
ADANIENT	1,29,80,100	-6.2%	2490.7	0.1%
ICICIBANK	11,58,08,000	-6.1%	1387.8	1.8%
ASIANPAINT	1,35,47,750	-4.8%	2875.7	3.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POWERINDIA	1,63,450	-7.3%	21499	-2.3%
INDUSINDBK	4,53,34,100	-6.6%	864.95	-0.1%
TORNTPOWER	36,57,575	-6.2%	1295.8	-0.1%
EICHERMOT	32,32,275	-4.6%	6838.5	-0.8%
PERSISTENT	23,70,100	-4.5%	6144	-0.1%

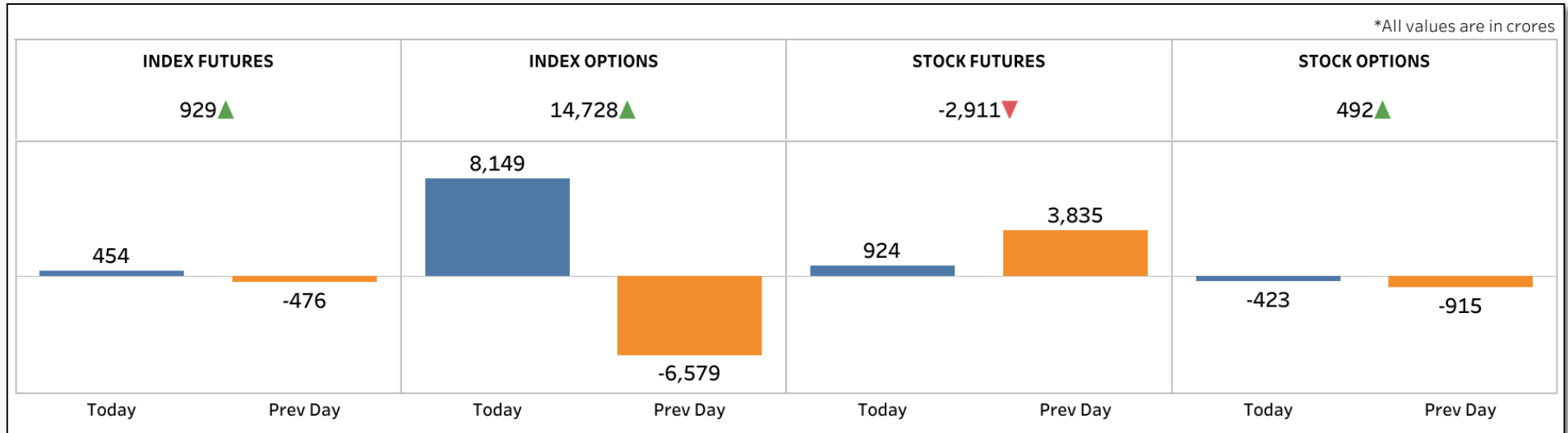
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

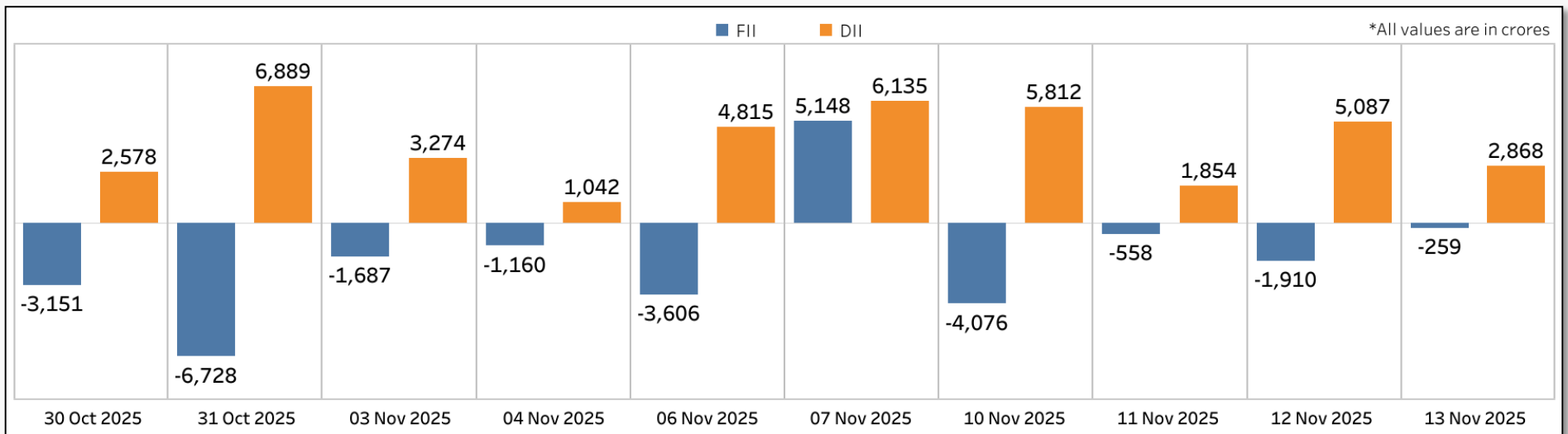
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-13,451 ▼	4,703 ▲	87,920 ▲	-39,677 ▼	-1,000 ▼	-11,083 ▼	18,750 ▲	26,056 ▲
13,391	2,293	41,779	52,935		11,081	20,450	23,835
-60	-2,410			0		1,700	
		-46,141			-2		-2,221
Net O/S 15,167 Today Prev Day	Net O/S -159,947 Today Prev Day	Net O/S 219,887 Today Prev Day	Net O/S 1,324,335 Today Prev Day	Net O/S 2,381 Today Prev Day	Net O/S 49,920 Today Prev Day	Net O/S 39,127 Today Prev Day	Net O/S -4,453,946 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
103,071 ▲	2,581 ▲	-163,006 ▼	2,126 ▲	-88,619 ▼	3,799 ▲	56,335 ▲	11,495 ▲
65,934		112,990		22,746	4,601		
					802		
-37,137	-6,892			-65,873		-12,213	-10,833
	-9,473	-50,016	-26,260			-68,548	-22,328
Net O/S 49,531 Today Prev Day	Net O/S 96,919 Today Prev Day	Net O/S -261,861 Today Prev Day	Net O/S 2,586,216 Today Prev Day	Net O/S -67,078 Today Prev Day	Net O/S 13,108 Today Prev Day	Net O/S 2,848 Today Prev Day	Net O/S 543,395 Today Prev Day

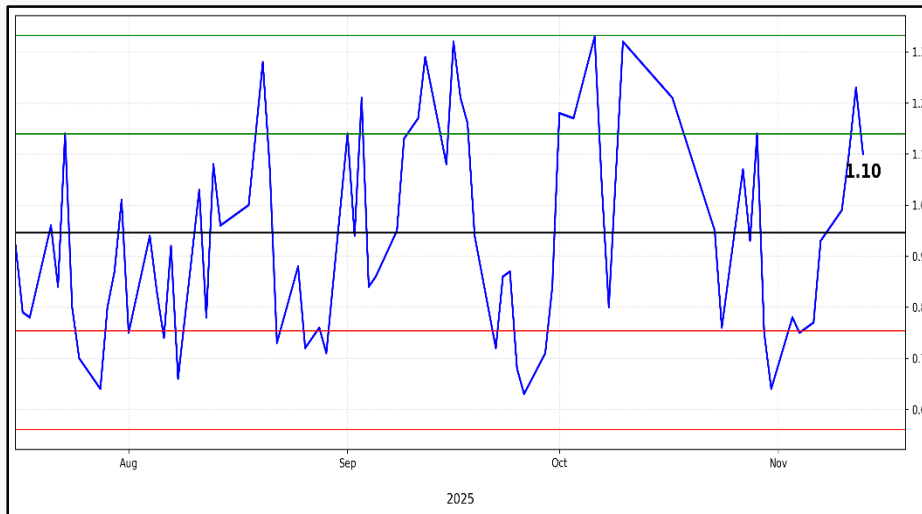
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



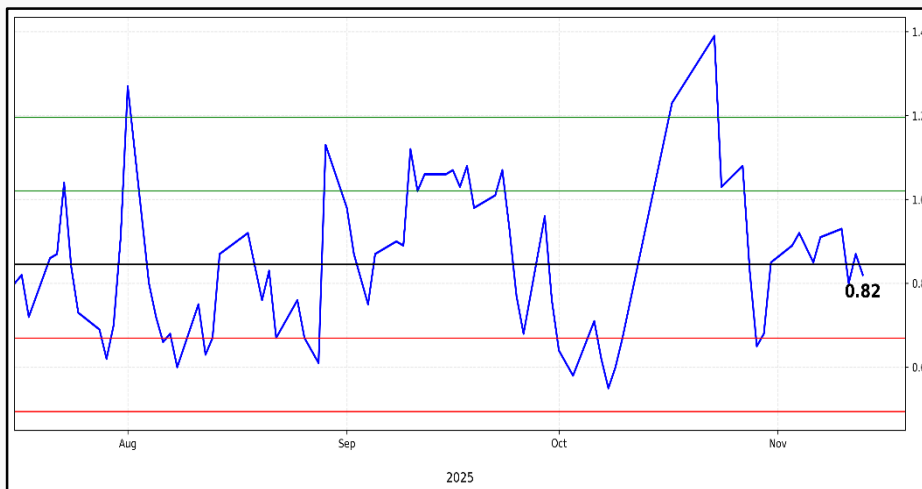
Nifty



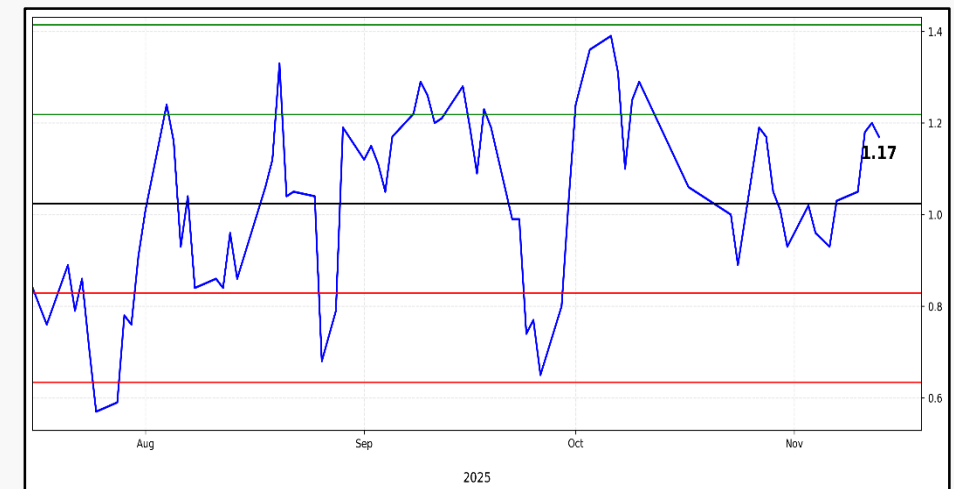
Bank Nifty



Fin Nifty

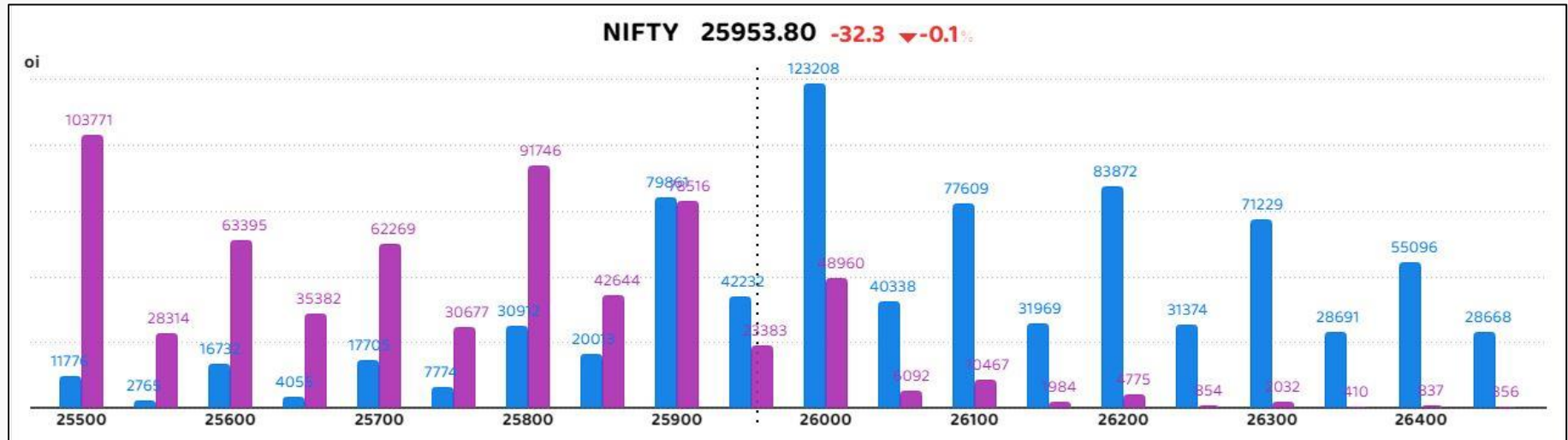


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 25,500 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.

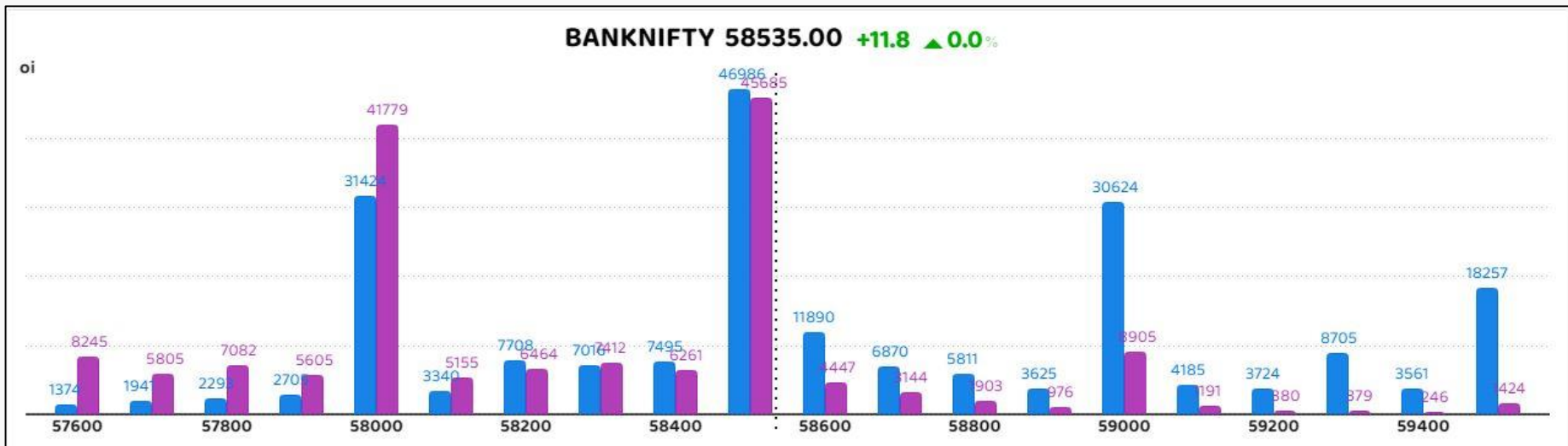
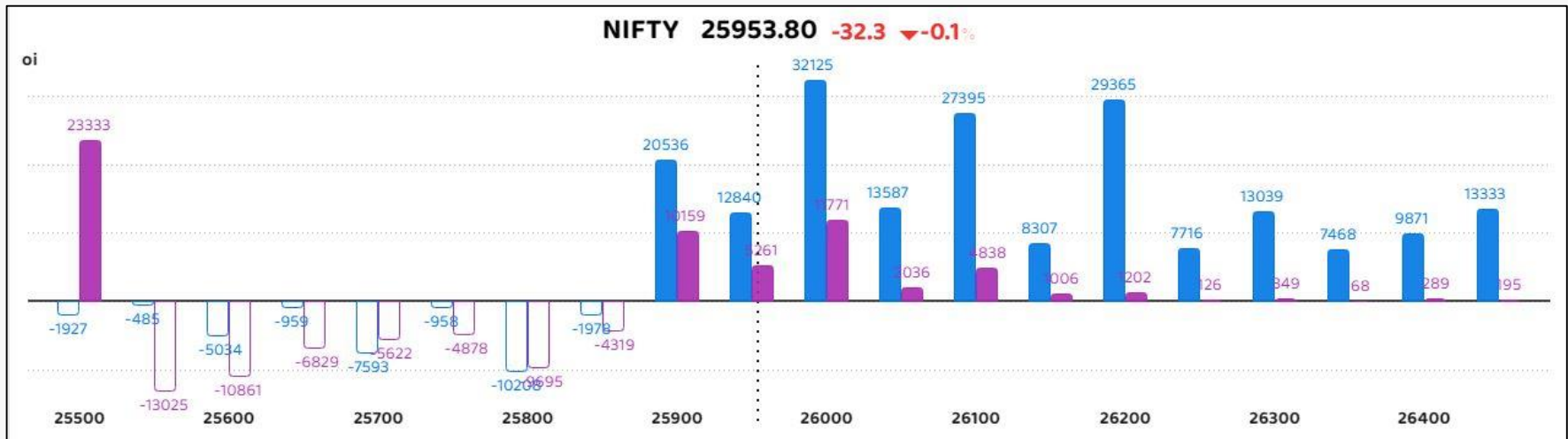


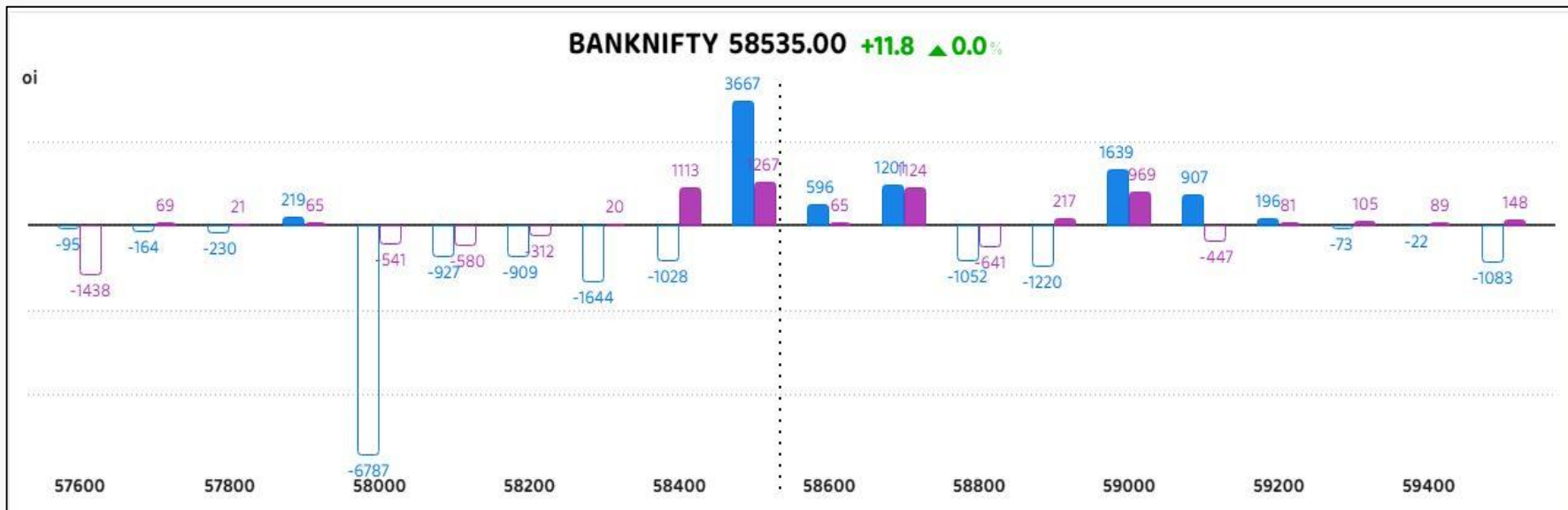
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,800 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	37385.0	0.4	23.5	36.2	2.1	62.6
ALKEM LABORATORI	5725.5	-0.7	29.2	40.1	13.6	59.0
EICHER MOTORS	6855.0	-0.4	25.3	36.9	9.3	58.0
ICICI LOMBARD GE	2033.8	0.3	23.2	38.2	3.2	57.2
HDFC BANK LTD	986.7	-0.3	15.9	28.0	1.5	54.5

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LIC HOUSING FIN	567.9	-0.9	18.7	41.9	18.7	0.0
HDFC LIFE INSURA	782.2	-0.1	18.5	80.6	17.6	1.4
INTERGLOBE AVIAT	5905.5	1.9	20.7	43.2	20.1	2.6
NTPC LTD	327.0	-0.1	19.2	116.6	16.7	2.6
GAIL INDIA LTD	183.7	0.7	24.7	91.4	22.4	3.3

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA STEEL LTD	176.7	-1.1	51.0	110.0	5.6	96.4
ALKEM LABORATORI	5725.5	-0.7	29.2	40.1	13.6	82.2
MUTHOOT FINANCE	3393.1	2.1	33.5	49.6	21.8	79.5
JUBILANT FOODWOR	573.5	-2.0	32.8	75.6	17.0	71.1
EICHER MOTORS	6855	-0.4	25.3	36.9	9.3	69.6

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BSE LTD	2760.2	-0.6	36.2	66.7	36.2	0.0
ONE 97 COMMUNICA	1307.5	0.1	32.8	59.8	32.8	0.0
LIC HOUSING FIN	567.9	-0.9	18.7	41.9	18.7	0.0
INDIAN HOTELS CO	717.7	1.5	21.0	46.4	10.4	0.8
INTERGLOBE AVIAT	5905.5	1.9	20.7	43.2	20.1	1.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
LODHA	1,217.6	0.0	7,605	1,328	5.7
YESBANK	22.5	-1.2	12,088	2,333	5.2
CGPOWER	745.2	0.7	13,653	2,652	5.1
KFINTECH	1,083.1	-1.6	5,887	1,218	4.8
POWERGRID	269.8	1.0	20,239	4,226	4.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
POWERINDIA	21,415.0	-2.7	5,912	7,961	1.3
BHEL	281.5	-1.9	27,606	29,140	1.1
SBIN	954.0	-0.3	76,880	71,986	0.9
TITAGARH	863.0	-1.8	9,956	8,933	0.9
SHRIRAMFIN	814.0	-1.0	33,378	28,384	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
CROMPTON	278.6	-1.0	12,785	12,520	100.0
DELHIVERY	434.0	0.6	13,762	13,635	100.0
ETERNAL	297.8	-3.6	52,311	44,925	100.0
FORTIS	953.0	-1.7	13,225	11,677	100.0
KFINTECH	1,083.1	-1.6	10,473	10,208	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ADANIENSOL	1,021.4	1.9	6,919	6,736	100.0
AMBER	7,122.0	-1.1	8,979	8,882	100.0
ASIANPAINT	2,879.4	4.0	44,140	41,224	100.0
BDL	1,517.9	-0.9	7,645	7,239	100.0
BIOCON	417.0	2.7	9,428	7,632	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ASIANPAINT	2,879.4	4.0	3,27,413	2,46,353	100.0
PRESTIGE	1,755.2	3.2	40,128	50,259	79.8
ASHOKLEY	150.4	5.5	1,01,029	1,28,968	78.3
ALKEM	5,725.5	-0.7	46,897	61,649	76.1
MOTHERSON	109.1	3.0	62,316	82,490	75.5

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BIOCON	417.0	2.7	33,706	36,345	92.7
TATASTEEL	176.6	-1.1	71,635	79,864	89.7
ASIANPAINT	2,879.4	4.0	1,84,238	2,31,917	79.4
ASHOKLEY	150.4	5.5	45,135	57,453	78.6
TMPV	398.0	-1.0	22,404	28,857	77.6

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ALKEM	5,725.5	-0.7	6,402	1,662	3.9
FORTIS	953.0	-1.7	13,225	5,016	2.6
PIIND	3,572.5	-0.5	8,409	3,224	2.6
APOLLOHOSP	7,440.5	-0.8	18,402	7,474	2.5
BLUESTARCO	1,787.7	-0.6	8,369	3,422	2.4

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
POWERINDIA	21,415.0	-2.7	6,710	2,059	3.3
ASIANPAINT	2,879.4	4.0	44,140	14,290	3.1
ALKEM	5,725.5	-0.7	4,029	1,307	3.1
PIIND	3,572.5	-0.5	5,439	2,205	2.5
MFSL	1,707.4	-0.7	4,205	1,738	2.4

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ALKEM	5,725.5	-0.7	46,897	2,496	18.8
ASHOKLEY	150.4	5.5	1,01,029	14,654	6.9
ASIANPAINT	2,879.4	4.0	3,27,413	49,889	6.6
MOTHERSON	109.1	3.0	62,316	10,490	5.9
PRESTIGE	1,755.2	3.2	40,128	7,643	5.2

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ALKEM	5,725.5	-0.7	18,333	1,562	11.7
PAGEIND	39,585.0	-2.8	20,528	2,166	9.5
ASIANPAINT	2,879.4	4.0	1,84,238	23,643	7.8
ASHOKLEY	150.4	5.5	45,135	5,806	7.8
BIOCON	417.0	2.7	33,706	5,782	5.8

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	2600	1736400	4.5%	2488	2300	1169100	-7.6%	JIOFIN	320	9989850	3.0%	311	310	6032450	-0.2%
ADANIPTS	1500	2720800	0.1%	1499	1400	1090125	-6.6%	JSWSTEEL	1340	1089450	13.2%	1184	1150	500175	-2.9%
APOLLOHOSP	7800	309000	4.8%	7441	7500	122375	0.8%	KOTAKBANK	2200	2614000	6.0%	2075	2100	1216400	1.2%
ASIANPAINT	3000	1455000	4.2%	2879	2800	1373000	-2.8%	LT	4100	1028475	2.4%	4003	3900	404250	-2.6%
AXISBANK	1240	2065000	1.2%	1225	1220	1077500	-0.4%	M&M	3800	731800	2.7%	3700	3600	598800	-2.7%
BAJAJ-AUTO	9000	248475	1.5%	8868	8500	116925	-4.1%	MARUTI	16500	480950	4.8%	15749	15000	173100	-4.8%
BAJAJFINSV	2100	927750	2.1%	2056	2000	631000	-2.7%	MAXHEALTH	1200	872550	9.3%	1098	1100	284025	0.2%
BAJFINANCE	1100	6744750	9.4%	1005	1000	2336250	-0.5%	NESTLEIND	1300	1852500	1.9%	1275	1300	225500	1.9%
BEL	430	9308100	2.4%	420	420	4591350	0.0%	NTPC	350	8461500	7.1%	327	300	2751000	-8.2%
BHARTIARTL	2100	3597175	0.4%	2092	2000	1851550	-4.4%	ONGC	260	16213500	3.6%	251	250	2544750	-0.3%
CIPLA	1600	1881750	4.9%	1526	1500	628500	-1.7%	POWERGRID	290	7674100	7.5%	270	270	2715100	0.1%
COALINDIA	389.75	4772250	1.7%	383	439.75	2114100	14.8%	RELIANCE	1500	5937500	-0.7%	1511	1500	3907500	-0.7%
DRREDDY	1300	2681250	5.3%	1235	1200	630625	-2.8%	SBILIFE	2020	2268750	1.6%	1988	1900	792000	-4.4%
EICHERMOT	7000	328825	2.1%	6855	6200	222250	-9.6%	SBIN	970	5271000	1.7%	954	920	4111500	-3.6%
ETERNAL	330	17709775	10.8%	298	300	7917625	0.8%	SHRIRAMFIN	820	1626900	0.7%	814	750	2260500	-7.9%
GRASIM	3000	1039500	8.0%	2778	2800	234000	0.8%	SUNPHARMA	1740	1060150	0.1%	1737	1660	463050	-4.5%
HCLTECH	1600	838600	0.1%	1599	1400	907200	-12.4%	TATACONSUM	1200	913000	3.9%	1155	1100	287650	-4.7%
HDFCBANK	1000	6900300	1.4%	987	950	2739550	-3.7%	TMPV	420	5684800	5.5%	398	400	3186400	0.5%
HDFCLIFE	820	1895300	4.8%	782	750	1230900	-4.1%	TATASTEEL	185	82439500	4.7%	177	180	17710000	1.9%
HINDALCO	800	2956100	-1.5%	812	800	2529100	-1.5%	TCS	3200	1402100	3.0%	3106	3000	861000	-3.4%
HINDUNILVR	2600	2256600	8.0%	2408	2500	707100	3.8%	TECHM	1500	913200	3.3%	1451	1400	466200	-3.5%
ICICIBANK	1400	6320300	1.0%	1386	1400	2706200	1.0%	TITAN	3800	500325	-1.0%	3839	3700	401625	-3.6%
INDIGO	6000	367650	1.6%	5906	5600	246450	-5.2%	TRENT	4800	925800	10.9%	4326	4300	426900	-0.6%
INFY	1600	3340000	3.8%	1542	1500	1935200	-2.7%	ULTRACEMCO	12500	133250	4.7%	11934	12000	70500	0.6%
ITC	420	9713600	3.5%	406	410	3560000	1.1%	WIPRO	250	11799000	1.9%	245	240	6618000	-2.2%

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

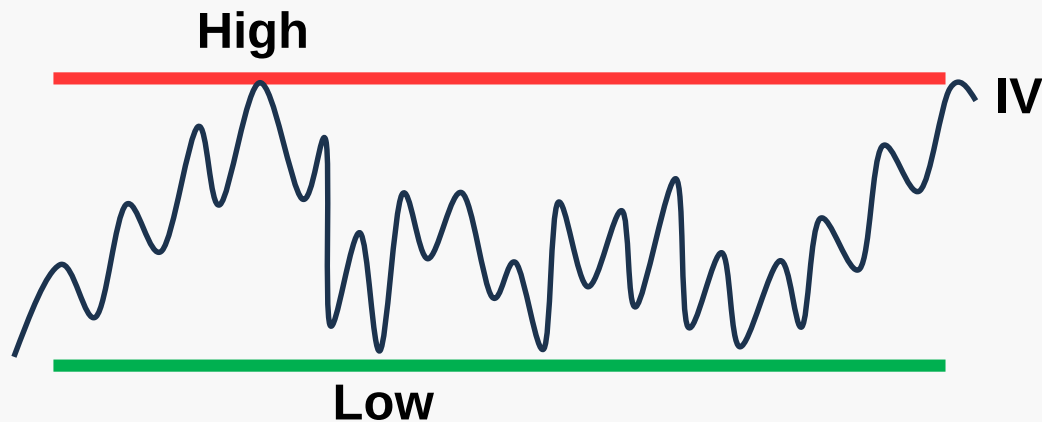
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

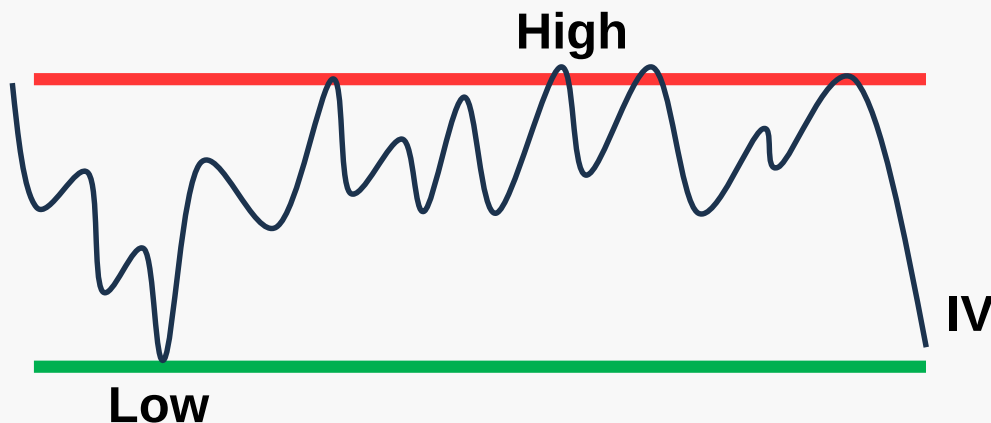
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

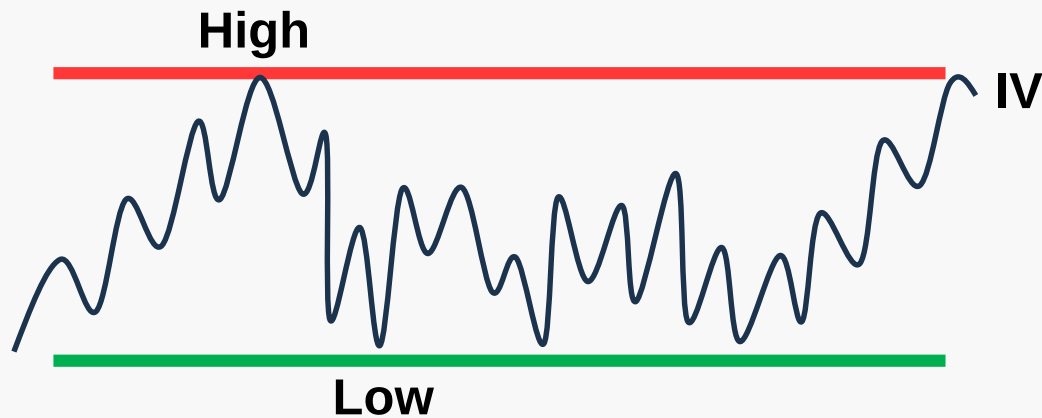


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

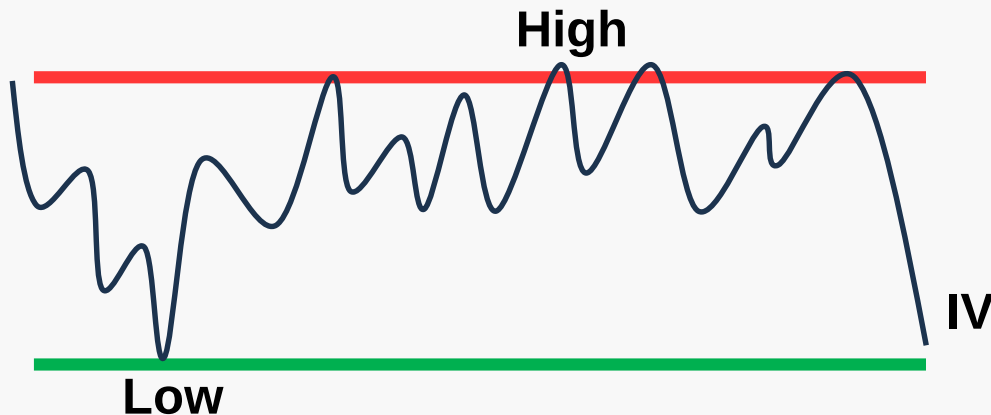


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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